BrainChip Holdings Ltd

Annual Report
2020

Board of Directors

Emmanuel Hernandez	Non-Executive Director and Chair
Louis DiNardo	Executive Director, Chief Executive Officer
Peter van der Made	Executive Director, Chief Technical Officer
Christa Steele	Non-Executive Director
Geoffrey Carrick	Non-Executive Director

Company Secretary

Kim Clark

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Auditors

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Share Registry

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Securities Exchange

Australian Securities Exchange Limited

Exchange Centre, 20 Bridge St, Sydney NSW 2000

Code: BRN

ABN: 64 151 159 812

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Letter from the Chair

To our Valued Shareholders,

Throughout the financial year of 2020 BrainChip demonstrated great success in advancing AI at the Edge and the commercialization of the Akida™ device and intellectual property. This success has included partnerships with industry leaders and expansion of the Company's presence with investors, editors and analysts that follow trends in the artificial intelligence area.

We concluded 2020 having made significant strides in the development of our technology and commercialisation of Akida with the launch of our Early Access Program and the availability of Akida evaluation boards, new partnerships, expansion of our leadership team and global facilities. In December we signed an agreement to license the Akida intellectual property to a major Japanese semiconductor company and we look forward to continuing this momentum throughout the upcoming year.

Our Early Access Program was launched in June 2020 and targeted specific customers in a diverse set of end markets in order to ensure availability of initial devices and evaluation boards for key applications. Multiple customers have committed to the advanced purchase of evaluation boards for a range of strategic AI Edge applications including Advanced Driver Assistance Systems (ADAS) and Autonomous Vehicles (AV), Unmanned Aerial Vehicles (UAV), Edge vision systems and factory automation. Among those joining the program are VORAGO Technologies in a collaboration intended to support a Phase I NASA program for a neuromorphic processor that meets spaceflight requirements. We are also collaborating with Tier-1 Automotive Supplier Valeo Corporation to develop neural network processing solutions for ADAS and AV.

This year, we partnered with Socionext, a leader in advanced System-on-Chip (SoC) solutions for video and imaging systems, to provide a complete low-power AI Edge network for vision, audio and smart transducers without the need for a host processor or external memory. Our partnership with Magik Eye Inc., developers of revolutionary 3D sensors that change how machines see the world, combines the best of AI with 3D sensing to provide a total 3D vision solution to manufacturers for fast 3D object detection and recognition in applications including robotics, automotive and emerging consumer products, such as AR/VR and others.

We began shipments of the Akida Neuromorphic System-on-Chip (NSoC) evaluation boards in November 2020. The evaluation board complements our Akida Development Environment (ADE), a robust development environment that allows potential customers to design a neural network as a Convolutional Neural Network and utilize the ADE workflow to convert the network to an Event-Based network or develop a native Spiking Neural Network.

To support our growth, we have invested in our sales and marketing team. We added a Vice President of Worldwide Sales to lead commercialization efforts of the Akida technology. We are also building an applications engineering team to best support customers and augment our worldwide design, development and research groups. Additionally, we added a Director of Technical Sales, focusing on strategic customer adoption and implementation of the Akida neuromorphic processor in industries including Smart Home, Smart City, Smart Healthcare and Smart Transportation. These personnel moves complement our expansion with a Software Development Centre in Hyderabad, India and the BrainChip Research Institute in Perth, Australia.

In August 2020 we entered into an equity financing arrangement with LDA Capital. This facility has allowed us to raise approximately US$15.1 million at share prices significantly above the prevailing price at the time the arrangement commenced. The Review of Operations and Notes 19 and 22 within the Financial Report explain the operation and the accounting treatment of this arrangement.

We are pleased with the success of the funding arrangement which has placed us in a strong cash position; with US$19.1 million at year end and access to an additional A$34 million. Shareholders should note that the treatment of this arrangement as a financial derivative related to the improved share price and the stronger AUD$ created a US$15.6 million non-cash accounting loss.

We are proud of our progress in 2020 in terms of both market readiness and an increase in market possibilities. From adding partners to opening up our Akida Development Environment and Early Access Program, we are making consistent, measurable progress in bringing AI to the Edge in a way that existing technologies are not capable.

Thank you for your continuing support,

Emmanuel Hernandez

Chair

Directors' Report

The directors submit their report of the consolidated entity, being BrainChip Holdings Ltd ("BrainChip Holdings" or the "Company" or "BrainChip") and its controlled entities ("Group" or "Consolidated Entity"), for the year ended 31 December 2020.

DIRECTORS

The names and details of the Company's directors in office during the financial period and until the date of this report are as follows:

Emmanuel Hernandez	Non-Executive Director and Chair
Louis DiNardo	Executive Director, Chief Executive Officer
Peter van der Made	Executive Director (appointed 29 January 2020), Chief Technical Officer
Steve Liebeskind	Non-Executive Director (resigned 31 December 2020)
Christa Steele	Non-Executive Director (appointed 14 September 2020)
Geoffrey Carrick	Non-Executive Director (appointed 23 November 2020)
Adam Osseiran	Non-Executive Director (resigned 29 January 2020)

The name of the Company's Secretary in office during the financial period and until the date of this report is as follows:

Kim Clark

SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

During the period, the COVID-19 outbreak was declared a pandemic by the World Health Organization (March 2020). The outbreak and the response of Governments in dealing with the pandemic is affecting general activity levels within the community, the economy and the operations of our business. The scale and duration of these developments remain uncertain as at the date of this report, however, whilst there appears to be minimal impact on our business to date, including consideration of key judgements and estimates used in presenting the financial report, there is a possibility of an impact on our future earnings, cash flow and financial condition. It is not possible to estimate the impact of the near-term and longer effects of Governments' varying efforts to combat the outbreak and support businesses. This being the case, we do not consider it practicable to provide a quantitative or qualitative estimate of the potential impact of this outbreak on the Group at this time. The financial statements have been prepared based upon conditions existing at 31 December 2020, including those which are evidenced by events occurring subsequent to that date.

On 14 February 2020, the Company officially received an EAR99 classification for its Akida™ Neuromorphic System-on-Chip ("NSoC"), Akida Software Development Environment (ADE) and related technologies from the U.S. Government. The U.S. Department of Commerce Bureau of Industry and Security (BIS) also established Akida as not being classified as identified technology for the purposes of the Committee on Foreign Investment (CFIUS), which could otherwise limit investment. The BIS ruling now allows BrainChip to export its AI technology, without additional U.S. government license, to non-restricted customers, including to high-growth customers in countries such as Japan, Korea, China and Taiwan.

In May 2020, the Company incorporated a new Australian subsidiary, BrainChip Research Institute Pty Ltd, to pursue the further innovative and develop the next generation of the Akida technology. Mr Peter van der Made, Chief Technical Officer, relocated to Perth, Western Australia in January 2020 to lead the research team.

In July 2020, the Group incorporated a new subsidiary in India, BrainChip Systems India Private Limited, employing and expanding the engineering development team.

On 24 June 2020, the Company announced the final conversion of Convertible Securities issued in accordance with the Convertible Securities Agreement ("CSA") was completed and the retirement of all associated Collateral Shares, signifying the Company had successfully repaid the US$2.85 million debt 12 months after it was entered into with CST Capital Pty Ltd ("CST") as trustee of the CST Investment Fund.

SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS (Continued)

On 13 August 2020, the Company announced it had entered into a Put Option Agreement ("POA") with LDA Capital Limited and LDA Capital LLC (together "LDA Capital"), a United States based investment group, to provide the Company with up to A$29 million in committed equity capital over the next 12 months which may be extended by the parties for a further 12 months. The Company would control the timing and maximum amount of the draw down under this facility subject only to the minimum draw down commitment of A$10 million with in the first 12 months.

Under the POA, the subscription price for the shares is set at 90% of the higher of the average VWAP of shares in the 30 trading day period after the issue of the capital call notice, and the minimum price notified to LDA Capital by the Company upon exercise of the put option. The VWAP calculation and the number of subscription shares is subject to adjustment as a result of certain events occurring including trading volumes falling below an agreed threshold level or a material adverse event occurring in relation to the Company.

As part consideration for entering into POA, the Company issued 75,000,000 unlisted options to LDA Capital comprising 37,500,000 unlisted options exercisable at A$0.15 and 37,500,000 unlisted options exercisable at A$0.20, expiring on 13 August 2023. The Company is also required to pay a commitment fee of A$580,000, comprising A$290,000 due and payable at the closing of the Company's first capital call and the remaining A$290,000 due and payable at closing of the second capital call. The commitment fee may be paid in shares at the Company's discretion.

On 24 August 2020, the Company issued a capital call notice to LDA Capital and issued LDA Capital with 35,000,000 shares ("Collateral Shares") which LDA Capital was entitled to sell on-market (subject to certain terms). Under the POA, unused Collateral Shares may be used for a subsequent call, bought back by the Company for nominal consideration or transferred to a trustee or nominee of the Company.

The POA was amended effective 22 October 2020, noting that BrainChip had fulfilled its obligation under the original agreement and that LDA Capital had agreed to increase the available funding to A$45 million along with an increase in BrainChip's minimum obligation to A$20 million, inclusive of any funds received under the first Capital call noted issued prior to the amendment.

The capital call notice issued on 24 August 2020 was settled during October and LDA Capital subscribed for 26,250,000 shares. As at 31 December 2020, LDA Capital holds 8,750,000 collateral shares.

On 14 September 2020, BrainChip announced the validation of the Akida Neuromorphic System-on-Chip (NSoC) design with functional silicon resulting in a complete neural network with no external components required.

On 23 December 2020, BrainChip announced the signing of the first Akida™ Intellectual Property License Agreement.

Board changes during the year comprised the resignations of Mr Adam Osseiran effective 29 January 2020, in order to assume a new role as the Chair of the Company's Scientific Advisory Board and Mr Steve Liebeskind effective 31 December 2020, and the appointments of Mr Peter van der Made on 29 January 2020, Ms Christa Steele on 14 September 2020 and Mr Geoffrey Carrick on 23 November 2020. Mr Emmanuel Hernandez assumed the role of Chair of the Board of Directors effective 1 January 2020.

There have been no other significant changes in the state of affairs of the Group.

PRINCIPAL ACTIVITIES

The principal activity of the Group is the development of software and hardware accelerated solutions for advanced artificial intelligence ("AI") and machine learning applications with a primary focus on the development of its Akida Neuromorphic Processor to provide a complete ultra-low power and fast AI Edge Network for vision, audio, olfactory and smart transducer applications.

EMPLOYEES

The Group employed 42 employees at 31 December 2020 (2019: 33).

DIVIDENDS

No dividends have been paid or declared by the Company during the financial year or up to the date of this report.

REVIEW OF OPERATIONS

The financial results of the Group are presented in US dollars, unless otherwise referenced.

The Company responded to the COVID-19 pandemic, as declared by the World Health Organisation in March 2020, in accordance with all Governments advice and restrictions, and where possible, took advantage of Government financial assistance provided.

As the pandemic has continued to the date of this report, there appears to be minimal impact on our business, other than the inability to meet and work with our customers face-to-face. Operations were expanded with a new innovation and research centre established in Perth, Australia, and a development and design centre in Hyderabad, India to absorb current contracted software development services.

Wafer fabrication of the Akida device was completed by 30 June 2020, cost savings initiatives implemented in late 2019 were further enhanced by the worldwide travel ban and the Group has been able to support all employees during the period.

The Company entered into various Early Access Programs ("EAP") with select customers to evaluate the use of the Akida NSoC and signed its first commercial agreement for an Akida Intellectual Property license in late December 2020.

Overview

The Group made a net loss after income tax for the year ended 31 December 2020 of $26,822,049 (2019: $11,310,062). The current year loss included non-cash losses of $10,137,774 of which $10,014,541 resulted from the fair valuation of the LDA financial liabilities (derivatives) recognised due to the agreed pricing mechanism. Current year loss also included $5,085,464 related to the amortisation of the deferred day one loss on recognition of the LDA Capital put option premium, being the difference between the total consideration payable and the derivative asset recognised.

Revenues for the year ended 31 December 2020 of $120,829 increased 60% from $75,574 in 2019 resulting from the recognition of EAP product sales and engineering support and development revenues.

Total operating expenses for the year ended 31 December 2020 of $11,242,032 increased 2% from $11,004,318 incurred in the year ended 31 December 2019. This increase was attributable to:

1) Research & development (R&D) expenses of $5,152,239 for the current period increased 14%, or $640,829 from a year ago. R&D costs comprise employee expense, contractor and other research and development costs, and amortisation of capitalised R&D intangible assets. Movements in R&D costs are summarised as follows:

    a) 3% increase in employee expenses reflecting the expansion of headcount into both Australia (2 additional) and India (5 additional), offset by increased credits received or receivable from government authorities; and

    b) Recognition of $1,928,651 of third-party pre-development services, including $1,050,000 (2019: $700,000) paid to Socionext as part of the progressive payments related to the fabrication of the Akida™ device;

2) Selling & marketing (S&M) expenses of $1,426,501 for the current period increased 34%, or $364,906 from a year ago. The increase reflects management's decision to engage external marketing consultants and rebuild the S&M headcount to target potential customers as development of Akida progressed during 2020;

3) General & administrative (G&A) expenses of $3,227,647 for the current period decreased 15% overall, or $567,553 from the same period a year ago as a result of:

    a) The appointment of a new CFO in March 2019 and additional headcount in the administrative team resulted in higher employee related expenses;

REVIEW OF OPERATIONS (Continued)

b) A reduction in Director remuneration in the current period due to a reduced number of board members following the 2019 resignations of Mr Stephe Wilks and Ms Julie Stein without replacement until September 2020 (Ms Steele) and November 2020 (Mr Carrick);

c) Increased cost saving initiatives implemented in late 2019 and extended into 2020 (as a result of COVID-19) specifically focussed on a reduction in travel expenses, legal and other consultants; and

d) increased listing related expenses as a result of increased shareholder activities during the current year; and

4) Share-based payment expense of $1,435,645 for the current period decreased 12%, or $200,468 from the same period a year ago. Share-based payments expense represents the current period expense for options, restricted stock units and performance rights issued to directors, employees and consultants, offset by the value of options that have been forfeited during the year.

The Company also recognised $268,522 of interest expense and $137,525 of fair value losses recognised through profit and loss related to the valuation and finalisation of the Convertible Securities.

Balance Sheet and Cashflows

At the end of the year the Group had consolidated net assets of $17,729,336 (2019: $9,096,350), including cash and cash equivalents of $19,136,425 (2019: $7,622,178).

Cash outflows used in operating activities increased to $10,028,976 (2019: $9,001,435) as noted in the Consolidated Statement of Cash Flows is reflective of the growth in the Company through achieving production of the Akida device during the year and continuing to develop the next generation of the device during a global pandemic.

In addition to Cash from Financing Activities from the LDA Capital and CST Agreements noted below, the Company received $1,989,898 from the issue of shares and $412,300 received from the U.S. Small Business Administration, “SBA”, Payroll Protection Program which is part of a program created by the USA Coronavirus Aid, Relief, and Economic Security Act, “CARES Act”, which provides financial relief from the COVID-19 emergency.

LDA Agreement

On entering the POA, the Company recognised the purchased put option as a derivative asset with a fair value of $1,153,781. The consideration payable comprised 75,000,000 unlisted options, recognised as a derivative liability totalling $5,800,734, and a commitment fee payable of $415,361. The difference between the total consideration payable and the derivative asset recognised, referred to as the day one loss, was deferred on the balance sheet and amortised to profit or loss in accordance with the Group’s accounting policy.

On 24 August 2020, the Company issued a Capital Call Notice under the POA to LDA Capital for 35,000,000 shares which triggered the POA pricing mechanism. The settlement of this Capital Call Notice in October 2020 resulted in LDA Capital subscribing for 26,250,000 ordinary shares. The net subscription proceeds received amounted to US$7,536,236 (A$10,538,125). The settlement of this Capital Call Notice also released the deferred day one loss to profit and loss of $5,085,464.

The derivative liability relating to the unlisted options issued to LDA Capital as part consideration was revalued during the period for exercised options and at the year end for the unexercised options. The remeasurement of the derivative liability resulted in a fair value loss of $10,014,541. Unlisted options exercised by LDA Capital contributed to cash inflows of $7,570,156 to the Company.

The amendment of the POA on 22 October 2020 resulted in the recognition of an additional purchased put option and a deferred day one gain of $635,049.

At the balance sheet date, other than cash, the assets and liabilities recognised relating to the POA are as follows: -

- a derivative asset for the unexercised portion of the purchased puts held by the Company in the amount of $1,470,275;
- a derivative liability relating to the unexercised unlisted options held by LDA Capital amounting to $3,179,756;
- a payable for the balance of the commitment fee payable to LDA Capital amounting to $223,400; and
- a deferred day one gain of $635,049 arising from the amended POA.

REVIEW OF OPERATIONS (Continued)

CST Agreement

At 31 December 2019, the Company recognised a receivable at fair value of $766,818 related to the sale of collateral shares tradeable by CST and financial liabilities related to the Convertible Securities valued at $736,932. These balances were valued in accordance with the CSA at the lower of $0.079 or 92% of the average 5 day VWAP during the 20 actual trading days prior to conversion.

In accordance with the CSA, at CST's election, the collateral shares could be used to offset the company's obligation to issue shares upon a conversion notice, otherwise the collateral shares would be returned to the Company. In February 2020, CST elected to purchase one parcel of collateral shares at an agreed price resulting in a gain on settlement of $87,832, The receivable at fair value related to the sale of collateral shares and financial liabilities related to the Convertible Securities were extinguished in the current period resulting in cash inflows before costs of $910,971. In August 2020, 21,868,796 options were issued on the exercise of options held by CST raising $1,845,133.

Operational Highlights

In addition to the highlights noted previously as Significant Changes in the State of Affairs, BrainChip commenced with preparations for a production version of the chip following the success of the Multi-Project-Wafer and Early Access Program. The company's first Intellectual Property License order was received in December for which proceeds were received subsequent to the financial year. As a result of the progress made in 2020, the company expects to begin manufacturing production devices in 2021 while intellectual property licenses remain a key focus.

Other key highlights throughout the year, as announced to the market, were as follows:

16 February 2020 – a new export classification issued from the U.S. Government's Bureau of Industry and Security (BIS). The Export Administration Regulations (EAR) classification of EAR99, which BrainChip has formally received, is a classification under the EAR which removes barriers for exporting AkidaTM to non-U.S. countries, and to non-restricted customers and use cases.

22 March 2020 – Socionext Inc., a leader in advanced SoC solutions for video and imaging systems, will offer customers an Artificial Intelligence Platform that includes the Akida SoC, an ultra-low power high performance AI technology.

4 May 2020 – the appointment of Dr Simon J. Thorpe to its Scientific Advisor Board. Dr Thorpe provides decades of insight in the area of event-based processing and hardware implementation.

24 May 2020 – the signing of a joint agreement for evaluation of the Akida neural network System-on-Chip (SoC) for Advanced Driver Assistance Systems (ADAS) and Autonomous Vehicle (AV) applications with a prominent Tier-1 automotive manufacturer.

2 July 2020 – in conjunction with Socionext and Taiwan Semiconductor Manufacturing Company (TSMC) wafer fabrication of the Akida device was completed as planned and the Company moved to complete assembly and test operations.

23 July 2020 – Professor Barry J. Marshall, a Nobel Prize laureate in Physiology and Medicine has joined the Company's Scientific Advisory Board.

17 August 2020 – a partnership with Magik Eye Inc., developers of revolutionary 3D sensors that change how machines see the world, to market a breakthrough solution for object detection, object classification and gesture recognition based on MagikEye's Invertible Light™ 3D depth sensing technology and the AkidaTM neuromorphic processor.

01 September 2020 – VORAGO Technologies signed the Akida Early Access Program Agreement. The collaboration is intended to support a Phase I NASA program for a neuromorphic processor that meets spaceflight requirements.

01 December 2020 – the commencement of a podcast series providing insight on the Company's strategy and progress for the engineering community in target markets as well as analysts, technical and financial press and investors.

2 December 2020 – confirmation that the Register-Transfer Level (RTL) design has been completed and transferred to the Company's manufacturing partner, Socionext America (SNA). SNA will complete the physical design of the device and all related engineering tasks required to transfer the full device files (tape-out) to Taiwan Semiconductor Manufacturing Company (TSMC) for mask creation and wafer fabrication.

REVIEW OF OPERATIONS (Continued)

7 December 2020 – commencement of shipping of the Company's evaluation boards for the Akida Neuromorphic System-on-Chip (NSoC) on 30 November 2020.

23 December 2020 – the U.S. National Aeronautics and Space Administration (NASA) had ordered the Akida Early Access Evaluation Kit for use by the NASA Shared Service Center (NSSC) at the NASA/Ames Research Center (ARC) at Moffett Field in California. The kit will enable NASA to evaluate the Akida technology for use in programs with a neuromorphic processor that meets spaceflight requirements.

23 December 2020 - the signing of an intellectual property license agreement with Renesas Electronics America Inc., a subsidiary of Japan-based Renesas Electronics Corp., a tier-one semiconductor manufacturer that specialises in microcontroller and automotive SoC products.

Risk

Factors that may impact the Company's performance include commercial viability and delays of new products and technology, delays in the establishment of an effective sales organisation and the global economy. Some of the risks related to this include:

- Risks of delays in new product development as the Company develops advanced products include: internal development, development by partners and integration of the technology with third party providers of intellectual property.
- Risks of delays in new product introduction as the Company commercialises advanced products include: wafer fabrication, assembly of products and test operations.
- Risks of delays in sales and marketing of new products include: recruitment and retention of the highly skilled and experienced human resources.
- Risks of delays in customer adoption of new products include: adequate training and education, collateral materials, application engineering and customer support.

The Company's performance and success is dependent upon the ability to effectively identify, protect and defend its intellectual property through patents or trade secrets. Some of the risks related to this include:

- Risks of intellectual property or other claims, which are costly to defend, could result in significant damage awards, and could limit the Company's ability to use certain technologies in the future.
- Risks of successful intellectual property infringement claims that may have an adverse effect on our business, consolidated financial position, results of operations, or cash flows.
- Risks of intellectual property infringement protection of the Company's patents, trademarks, trade secrets, copyrights may not be available or feasible in every country in which our products and services could be distributed.
- Risks of intellectual property protection efforts to protect proprietary rights may not be sufficient or effective. Risks of intellectual property that may not have adequate patent or copyright protection for certain innovations, that the scope of the protection will be insufficient or that an issued patent may be deemed invalid or unenforceable.
- Risks that intellectual property held as trade secrets could be compromised by outside parties, or by our employees.
- Risks that changes in government rules governing export of artificial intelligence-related products and technologies may prohibit the sale of our products or licensing of our technology in certain regions of the world.

Other key risks the Company has identified include:

- Risks of an information technology breach that may result in litigation, and potential liability.
- Risks of international operations exposure that could harm our business, operating results, and financial condition include: changes in local political, economic, regulatory, tax, social, labour conditions and health and safety issues, may adversely harm our business.
- Risks of human resources recruitment and retention of skilled personnel, motivate and reward key personnel, maintain the Company's corporate culture to successfully execute the Company's business.
- Risks of competition addressing the Company's markets and customers with advanced products with similar or better performance.

SIGNIFICANT EVENTS AFTER THE BALANCE DATE

Subsequent to the end of the year, LDA converted the remaining 13,145,556 options exercisable at A$0.20 by the end of January 2021, resulting in a cash injection of $2,031,235 (A$2,629,111). A further 4,125,000 options have been exercised under the LTIP.

No other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in subsequent financial years.

LIKELY DEVELOPMENTS AND EXPECTED RESULTS

It is expected that the Group will further develop the Akida Neuromorphic System-on-Chip (NSoC).

ENVIRONMENTAL REGULATION AND PERFORMANCE

The Group is not subject to any significant environmental regulation under Australian Commonwealth of State Law.

SECURITIES ON ISSUE

The Company has the following securities on issue as of the date of this report:

Ordinary shares	1,629,737,144
Options over ordinary shares	154,145,000
Restricted stock units	4,487,500
Performance rights	12,500

SHARE OPTIONS

As at the date of this report, there were 150,020,000 unissued ordinary shares under options (154,145,000 at the reporting date). Refer to the remuneration report for further details of the options outstanding for Key Management Personnel ("KMP").

Option holders do not have any right, by virtue of the option, to participate in any share issue of the Company or any related body corporate.

During the financial year 34,823,796 options were exercised and 15,625,000 were forfeited. A further 4,125,000 options were exercised subsequent to the end of the year and to the date of this report.

RESTRICTED STOCK UNITS

There were 4,462,500 Restricted Stock Units ("RSU") on issue at the reporting date and the date of this report. 3,800,000 RSUs were converted during the year with none converted after the end of the year.

PERFORMANCE RIGHTS

There were 25,000 Performance Rights ("PR") on issue at the reporting date, of which 12,500 were converted after year end. 12,500 PRs remain on issue at the date of this report.

CORPORATE GOVERNANCE

The directors of the Group support and adhere to the principles of corporate governance, recognising the need for the highest standard of corporate behaviour and accountability. Please refer to the 2020 Corporate Governance Statement dated 23 February 2021 released to the ASX and posted on the Company website which outlines the Group's approach to corporate governance and sets out the key charters and polices of the Group.

INFORMATION ON DIRECTORS

Names, qualifications, experience and special responsibilities

Emmanuel Hernandez – BSC, CPA, MBA - Non-Executive Director (Appointed 7 Jul 2017); Chair (Appointed 1 Jan 2020)

Mr. Hernandez is a highly regarded Silicon Valley technology executive with a broad experience of more than 40 years in the Semiconductor industry, and more than 10 years in the Renewable Energy industry and the Communications and Networking industry, and cumulative public and private board experience of over 16 years.

His professional resume includes key roles with some of Silicon Valley's largest and most successful technology companies including National Semiconductor (acquired by Texas Instruments in 2012), Cypress Semiconductor (NASDAQ: CY) and ON Semiconductor (NASDAQ: ON). Mr. Hernandez served in various finance capacities at National Semi between 1976-1993, then joined Cypress Semi where he served as Chief Financial Officer ("CFO") between 1993-2004. Mr. Hernandez then joined SunPower Corp where he served as CFO between 2005-2008. Mr. Hernandez's executive successes have led him to be a highly sought-after operating consultant and board member including serving as an operating Partner at Khosla Ventures, a prominent Silicon Valley venture capital firm.

Mr. Hernandez's public company directorships are noted below. His board service also includes Aruba Networks, (enterprise networking) acquired by Hewlett Packard Enterprise in 2015, EnStorage, Inc., (flow battery/storage technology) and Soraa, Inc., (LED and laser technology).

Mr Hernandez is a member of the Company's Remuneration & Nomination Committee and Audit & Governance Committee.

Other directorships in the past 3 years:

- ON Semiconductor Corp.: Audit Committee Chair/member – 20 Nov 2002 to present
- SunEdison, Inc.: Executive Chair, Audit Committee member – 12 May 2009 to 29 Dec 2017
- Rodgers Silicon Valley Acquisition Corp: CFO and Executive director – 2 December 2020 to present.

Louis DiNardo, BA – Executive Director and Chief Executive Officer (Appointed 9 Dec 2016)

Mr DiNardo has a strong track record of growing publicly listed and privately owned technology businesses and has worked in venture capital firms where he has successfully backed a number of emerging technology companies. Some of his recent past roles include the President and Chief Executive Officer (CEO) of Exar Corporation, where he was credited for turning around the underperforming NYSE-listed mid-cap semiconductor company by revamping the management team, cutting operating expenses and growing revenue and profit. His efforts helped Exar achieve 16 consecutive quarters of revenue and EPS growth. Before Exar, Mr DiNardo was responsible for investing in and overseeing a portfolio of companies, including programmable logic companies, while he served as a partner at Crosslink Capital from 2008 to 2012 and the Managing Director at Vantage Point Venture Partners from 2007 to 2008.

Mr DiNardo also served as President and Chief Executive Officer, as well as Co-Chair of the Board of Directors, at Xicor Corporation from January of 2001 until NASDAQ-listed Intersil Corp acquired the company in July of 2004. He subsequently held senior executive positions at Intersil and became its President and Chief Operating Officer.

Mr DiNardo has held no other public company directorships in the past three years.

Peter van der Made – Executive Director (Appointed 29 Jan 2020)

Mr van der Made has been at the forefront of computer innovation for 40 years. He is the inventor of a computer immune system at vCIS Technology where he served as Chief Technical Officer, and then Chief Scientist when it was acquired by Internet Security Systems, and subsequently IBM. Previously, he designed a high resolution, high speed colour Graphics Accelerator chip for IBM PC graphics at PolyGraphics Systems. He was the founder of PolyGraphics Systems, vCIS Technology, and BrainChip Inc.

Mr van der Made was previously held the position of Executive Director of BrainChip Holdings Ltd from 10 September 2015 to 1 January 2018.

Mr van der Made has held no other public company directorships in the past three years.

INFORMATION ON DIRECTORS (Continued)

Names, qualifications, experience and special responsibilities (continued)

Steve Liebeskind, BComm, CAANZ – Non-Executive Director (Appointed 1 May 2018, resigned 31 December 2020)

Mr. Liebeskind is an experienced front line operational manager with a broad set of skills developed from his time working with Ernst & Young in Australia and Canada. He has held positions of Advisor, CEO and COO for high growth companies in the telecommunications, technology and financial services sector. Mr Liebeskind is a founding principal of Sydney Capital Partners, a boutique corporate advisory firm.

Mr Liebeskind was Chair of the Company's Audit & Governance Committee effective from 1 April 2019 and joined the Renumeration and Nomination Committee as Chair on 1 January 2020. He has resigned from both committees effective 31 December 2020.

Other directorships in the past 3 years: Nil.

Christa Steele – Non-Executive Director (Appointed 14 September 2020)

Ms Steele was a partner and board member of FIG Partners, a full-service boutique investment bank, until its sale in April 2019. Prior to this date, she spent two decades (1995-2015) in senior level positions within the financial services industry where she led the execution of strategic initiatives, streamlined operations, implemented technology, led digital transformation, underwrote, structured and managed retail and commercial credit functions, grew new markets and oversaw M&A activity. Ms Steele's most notable role was as President and CEO of Mechanics Bank (MCHB 2013-2015) where she led a significant financial turnaround where the value of the company doubled and was sold at a premium in 2015. Previously, Ms Steele served as EVP and other roles of F&M Bank.

Ms Steele currently serves as Director of Recology, Tanimura & Antle, and BALCO Holdings, as well as the listed corporations noted below.. Mr Steele received her Bachelors Degree from California State University and Master's Degree from the University of Southern California.

Ms Steele is a member of the Company's Remuneration & Nomination Committee and Audit & Governance Committee, effective from 2 October 2020, and Audit & Governance Committee Chair from 1 January 2021.

Other directorships in the past 3 years:

- Non-Executive Director of OLG Bancorp (NYSE: OFG) (May 2018 – October 2020).

Geoffrey Carrick – Non-Executive Director (Appointed 23 November 2020)

Mr Carrick held the positions of Head of Corporate Finance at Shaw and Partners Limited from March 2016 through July 2019, and Head of Equity Capital Markets at Commonwealth Bank from 2012 – 2015. From 1999 through 2011 Mr Carrick was Division Director of Equity Capital Markets at Macquarie Capital.

Mr Carrick currently serves as Director of VCF Capital Partners Pty Limited and Non-Executive Director of Global Study Partners Holdings Pty Limited. Mr Carrick is a graduate of the University of Sydney B.Ec, LLB.

Mr Carrick is a member and Chair of the Company's Remuneration & Nomination Committee, and a member of the Audit & Governance Committee, effective 1 January 2021.

Other directorships in the past 3 years: Nil.

Adam Osseiran, A/Prof – Non-Executive Director (Appointed 10 Sep 2015, resigned 29 Jan 2020)

Dr Osseiran has been involved with BrainChip since 2012, providing advice and assistance on several aspects of technology, applications and commercial opportunities. Dr Osseiran is the co-founder of Termite Monitoring and Protection Solutions Pty Ltd, founded in 2013, to exploit the unique Wireless Smart Probe acoustic termite detection technology. He is also Senior Technical Advisor to Mulpin (MRL) Ltd which has developed a new patented concept of embedding electronic components within a multi-layered printed circuit board.

Dr Osseiran is the co-founder and director of Innovate Australia, established to promote and assist Australian innovators and encourage innovation and was the President of the Inventors Association of Australia from 2013-2014. Dr Osseiran holds a Ph.D. in microelectronics from the National Polytechnic Institute of Grenoble, France and a M.Sc. and B.Sc. from the University of Joseph Fourier in Grenoble. Dr Osseiran is currently Associate Professor of Electrical Engineering at Edith Cowan University in Perth, Western Australia.

INFORMATION ON DIRECTORS (Continued)

Names, qualifications, experience and special responsibilities (continued)

Dr Osseiran served as a member on the Company's Remuneration & Nomination Committee effective from 1 May 2018 until 29 January 2020.He was appointed Chair of the Scientific Advisory Board of the BrainChip Group when he left the board.

Other directorships in the past 3 years: Nil.

COMPANY SECRETARY

Kim Clark (Appointed 1 Dec 2018)

Ms Clark is an experienced business professional with 21 years' experience in the Banking and Finance industries and 8 years as a Company Secretary (in-house) of an ASX300 company. Her experience includes debt and capital raising, risk management, mergers and acquisitions, compliance and governance. Ms Clark currently acts as Company Secretary to various ASX listed and unlisted companies in Australia and is the Head of Corporate Services for Boardroom Pty Limited's Queensland office.

INTERESTS IN THE SHARES, OPTIONS AND PERFORMANCE RIGHTS OF THE COMPANY

As at the date of this report, the interests of the directors in the shares, options and performance rights of the Company were:

Director	Fully Paid Ordinary Shares	Options over Ordinary Shares
E Hernandez	-	8,000,000
L DiNardo	11,779,361	57,500,000
Peter van der Made	176,305,508	-
C Steele	-	-
G Carrick	-	-
Total	**188,084,869**	**65,500,000**

DIRECTORS' MEETINGS

The number of meetings of directors (including meetings of committees of directors) held during the year and the number of meetings attended by each director was as follows:

	Directors Meetings		Audit & Governance Committee Meetings (1)		Remuneration & Nomination Committee Meetings (1)	
	Eligible to attend	Attended	Eligible to attend	Attended	Eligible to attend	Attended
E Hernandez	13	13	6	6	3	3
L DiNardo	13	13	6	6	3	3
P van der Made	12	12	n/a	n/a	n/a	n/a
S Liebeskind	13	13	6	6	3	3
C Steele	5	4	1	1	1	1
G Carrick	-	-	n/a	n/a	n/a	n/a
A Osseiran	1	1	n/a	n/a	n/a	n/a

(1) Directors who are not members of the Audit & Governance Committee or Remuneration & Nomination Committee may be invited to attend meetings of the Committees.

DIRECTORS' MEETINGS (Continued)

Committee Memberships

The Board maintained an Audit & Governance Committee and established a Remuneration & Nomination Committee during the year. The membership of each Committee is set out below:

Audit & Governance Committee	Remuneration & Nomination Committee
S Liebeskind (Chair) (resigned 31 December 2020)	S Liebeskind (Chair from 1 January 2020, resigned 31 December 2020)
E Hernandez	E Hernandez
C Steele (appointed 2 October 2020; appointed Chair 1 January 2021)	C Steele (appointed 2 October 2020)
G Carrick (appointed 1 January 2021)	G Carrick (appointed member and Chair - 1 January 2021);
	A Osseiran (resigned 29 January 2020)

REMUNERATION REPORT (Audited)

This remuneration report for the year ended 31 December 2020 outlines the remuneration arrangements of the Group in accordance with the requirements of the *Corporations Act 2001* ("the Act") and its regulations. This information has been audited as required by section 308(3C) of the Act.

The remuneration report is presented under the following sections:

1. Introduction
2. Remuneration governance
3. Non-executive Director remuneration arrangements
4. Executive remuneration arrangements
5. Options and performance rights granted as part of remuneration
6. Company performance and the link to remuneration
7. Executive contractual arrangements
8. Equity instruments disclosures
9. Other transactions and balances with Key Management Personnel ("KMP")

REMUNERATION REPORT (Audited) (Continued)

1. Introduction

The Remuneration Report details the remuneration arrangements for KMP who are defined as those persons having authority and responsibility for planning, directing and controlling the major activities of the Group, including any director of the parent entity.

For the purposes of this Remuneration Report, the term 'executive' includes the executive directors and senior executives of the Parent and the Group.

Details of KMP of the Group are set out below:

Key Management Personnel

Name	Position	Date of appointment	Date of resignation
Directors			
E Hernandez [(1)]	Non-Executive Director	7 July 2017	-
L DiNardo	Executive Director & Chief Executive Officer	30 September 2016	-
P van der Made [(2)]	Executive Director & Chief Technical Officer	10 September 2015	-
S Liebeskind	Non-Executive Director	1 May 2018	31 December 2020
C Steele	Non-Executive Director	14 September 2020	-
G Carrick	Non-Executive Director	23 November 2020	-
A Osseiran	Non-Executive Director	10 September 2015	29 January 2020
Other Key Management Personnel			
A Mankar	Chief Development Officer	1 October 2014	-
K Scarince	Chief Financial Officer	11 March 2019	-
R Telson	Vice President of Worldwide Sales	10 August 2020	-
R Levinson	Chief Operating Officer	18 March 2019	22 July 2020

(1) Mr Hernandez was appointed Chair effective 1 January 2020.
(2) Mr van der Made was appointed as Executive Director effective 29 January 2020. He was previously reported as a KMP.

REMUNERATION REPORT (Audited) (Continued)

2. Remuneration governance

Remuneration & Nomination Committee

The Remuneration & Nomination Committee operated throughout the year with the purpose of assisting the Board in establishing the Group's remuneration philosophy, guiding principles and practices and for monitoring their effectiveness. The principal objective of the Company's remuneration programs is to attract, retain and motivate highly talented individuals who can deliver competitive results and financial returns to our shareholders, while accomplishing both our short and long-term plans and goals. The Remuneration & Nomination Committee is specifically tasked with reviewing and making recommendations to the Board in respect of the Group's remuneration policies, short and long-term incentives and equity remuneration, including the structure and amount of remuneration of executives and non-executive directors. The Remuneration & Nomination Committee is also responsible for overseeing the succession planning of the Chief Executive Officer and other top executives.

Remuneration approval process

The Board approves, subject to a recommendation from the Remuneration & Nomination Committee the remuneration arrangements of the non-executive Directors, executive directors and executives and all awards made under the Company's 2018 Long Term Incentive Plan ("LTIP"). Aggregate fees paid to non-executive directors are paid within the total remuneration fee pool approved by shareholders.

Remuneration Strategy

The remuneration strategy of the Group is evolving towards the following core principles:

- Alignment with Shareholder Interests. The Group's current use of equity as part of its remuneration structure enhances alignment between executives' interests with those of our shareholders. Achievement of the Group's objectives are aimed at creating shareholder value, thus directly benefiting executives and non-executive directors as well.
- Pay for Performance. The Group has not implemented a cash bonus or variable remuneration program in the current year, acknowledging that achieving or exceeding expected results and performance will be a necessary condition for our executives to realise targeted levels of remuneration, particularly with respect to variable pay and long-term incentives. However, cash bonus and variable remuneration are awarded to KMPs subject to Board approval.
- Market or Peer Company Comparison. The Company's remuneration program must be competitive with those of our peer companies in order to attract and retain our executives. As a general rule, we target the market median (50th percentile) though we may deviate, up or down, from the median from time to time, due to a variety of factors. The Remuneration & Nomination Committee is not planning to recommend significant changes to its remuneration programs until the Company achieves significant progress in Akida-related developments.
- Retention. The Company's remuneration program is designed to attract and retain highly talented individuals critical to our success by providing programs with retentive features. The Group's current use of equity, which is an acceptable methodology internationally, as part of its remuneration structure includes performance and/or time-based vesting in order to retain our executives. Achieving our objectives should lead to creation of shareholder value which would benefit executives and non-executive directors as their equity grants vest over time. Vested shares do not have value until exercise prices are exceeded thereby raising shareholder value over time.
- Separate Remuneration Structures. In accordance with best practice corporate governance, the structure of executive and non-executive directors' remuneration is separate and distinct.

  Risk Analysis. The Remuneration & Nomination Committee considers the potential for unacceptable risk-taking in its remuneration design. We believe that the design of our executive remuneration does not unduly incentivize our executives to take actions that may conflict with the long-term best interests of the Company and its shareholders. Specifically, the Company provides executives with an appropriate mix of pay elements between cash and equity, with compensation not overly weighted towards any one remuneration component.

Adoption of 2019 Remuneration Report

At the Annual General Meeting of Shareholders on 27 May 2020, shareholders resolved to adopt the Remuneration Report as contained within the 2019 Annual Report.

REMUNERATION REPORT (Audited) (Continued)

3. Non-executive director remuneration arrangements

Remuneration Policy

The Board seeks to set aggregate remuneration for non-executive directors at a level which provides the Company with the ability to attract and retain directors of the highest calibre, highest ethical standard and broad experience, whilst incurring a cost which is competitive.

The Company's constitution and the ASX listing rules specify that the non-executive director fee pool shall be determined from time to time by a general meeting. The last determination was at the Company's 2018 Annual General Meeting, held on 10 May 2018, where shareholders approved an aggregate fee pool of A$600,000 per year.

Structure

The remuneration of non-executive directors consists of cash and participation in the Group's LTIP at the Board's discretion and subject to approval by shareholders.

With effect from 11 February 2019, each non-executive member of the Board received a base fee of A$90,000 per year, the Non-Executive Chair received an additional fee of A$60,000 per year; the Audit & Governance Committee Chair and the Remuneration & Nomination Committee Chair each received a fee of A$15,000 per year and each member of those Committees received A$10,000 per year.

The total remuneration received by each director during the reporting period is disclosed in Section 7.

4. Executive remuneration arrangements

Remuneration Policy

The Company recognises that if it is to be successful in a relatively nascent industry with its pioneering technology, it must recruit and retain highly talented individuals. Considering the stage of our technology and business development, these individuals also bear the incremental risk of joining an early-stage public Company. Although it is not the only factor, remuneration plays a key part in determining the Company's ability to compete for human resources and retain executives, particularly in the technical fields. In doing so, the Remuneration & Nomination Committee, the Board and management aim to design competitive remuneration programs commensurate with executives' positions, responsibilities and experience, and incentivize them to drive towards the achievement of the Company's short and long-term objectives.

Structure

Remuneration consists of the following key elements:

- Fixed remuneration (base salary and superannuation); and
- Variable remuneration (variable commissions, shares, share options, restricted stock units and performance rights).

Fixed Remuneration

The fixed pay element of the Company's remuneration program for executives are designed to attract and retain top talent in a competitive environment, taking into consideration the role, responsibilities, capabilities and experience of individual executives. In 2020 executives received a fixed base pay and their contracts do not include any guaranteed base pay increases. Fixed remuneration is reviewed annually by the Board. This process consists of a review of the Company's results, individual performance, relevant comparative remuneration internally and externally.

Variable Remuneration

Variable commissions

A contract for a sales and marketing executive includes variable commissions of up to 30% of the annual base salary, contingent upon meeting agreed performance objectives.

Cash Bonuses

Some executive contracts include a provision for cash bonuses on such terms and conditions as may be determined from time to time by the Board (in 2020 a moderate cash bonus was awarded to a KMP for a specific performance with regards to deliverable on the Akida technology). The Remuneration & Nomination Committee has no current plans to recommend a bonus program until the Company achieves substantial Akida-related commercialisation progress.

REMUNERATION REPORT (Audited) (Continued)

4. Executive remuneration arrangements (continued)

Variable Remuneration (continued)

2018 and 2015 Long Term Incentive Plan (LTIP), 2015 Performance Rights Plan (PRP) and 2015 Directors' and Officers' Option Plan (DOOP).

The granting of equity instruments is a critical element of the Company's remuneration program for executives as it aligns their interests directly with that the Company. The realisation of value from these equity grants over time, are highly dependent on the success of the Company. As a result, equity grants incentivise our executives to drive towards achievement of our short and long-term objectives.

The Group does not currently grant equity to executives on an annual basis however it does re-fresh annually as applicable. The market internationally incentivises executives with annual and refresh scenarios. The Remuneration & Nomination Committee will monitor the remuneration program of the Group, particularly from a retention standpoint, but has no current plans to recommend significant changes to our remuneration program until the Company achieves substantial Akida-related commercialisation progress.

The 2018 LTIP was adopted by shareholders on 10 May 2018. The Company had equity instruments that were issued under the 2015 LTIP however all new awards post 10 May 2018 have been issued under the 2018 LTIP. All equity instruments issued under the 2015 PRP and the 2015 DOOP have been exercised or expired, and these plans have been terminated.

The objective of the 2018 LTIP is to attract and retain key employees and consultants. It is considered that the LTIP, through the issue of shares, share options, restricted stock units and performance rights ("*LTIP equity instruments*"), will provide eligible participants with the opportunity to participate in the future growth of the Company. Share options offered under the LTIP must be offered at no more than a nominal value and under terms to be determined by the Board from time to time. It is not the intention of the Company to apply for quotation of any of the share options which are issued under the LTIP.

LTIP equity instruments issued to eligible participants are issued in accordance with the 2018 LTIP and, historically, in accordance with the 2015 LTIP. The number of LTIP equity instruments issued is determined by the policy set by the Board upon recommendation by the Remuneration & Nomination Committee and is based on each eligible participant's role and position within the Group.

The LTIP equity instruments will vest over periods as determined by the Board and eligible participants are able to exercise or convert the LTIP equity instruments any time after vesting and before the expiry date. Where an eligible participant ceases employment prior to the vesting of their LTIP equity instrument, the LTIP equity instrument will generally automatically lapse and be forfeited. Where an eligible participant ceases employment after the vesting but before the exercise of their LTIP equity instrument, unless the eligible participant has been terminated for cause (when their LTIP equity instrument will immediately lapse), the LTIP equity instrument may generally be exercised by the eligible participant within a period after cessation of employment prescribed either under the applicable Plan or offer documentation or a longer period as determined by the Board. Any LTIP equity instruments not exercised within such period will automatically lapse and be forfeited.

(a) Options and performance rights linked to performance criteria

The Board has full discretion in approving specified performance criteria linked with options granted to KMP with the intention to align the interests of management with that of shareholders and reward the execution of corporate strategies that are expected to increase shareholder wealth.

No options over ordinary shares or performance rights with performance criteria attached were issued during 2020, 2019 or 2018 and there are no unsatisfied performance criteria at year end.

Details of options over ordinary shares in the Company provided as remuneration with linked performance conditions in the prior years are as follows:

	Year	Options awarded during the year	Grant Date	Fair value per option	Total Fair Value	Exercise price per option	Expiry date	Options vested during the year	Options forfeited during the year	Options lapsed during the year
Directors		**Number**		**US$**	**US$**	**US$**		**Number**	**Number**	**Number**
L DiNardo	2016	21,000,000	28/09/2016	$0.064	1,334,151	$0.172	30/09/2021	5,250,000	-	-
	2017	6,000,000	16/02/2017	$0.175	1,050,104	$0.173	30/09/2021	1,500,000	-	-

REMUNERATION REPORT (Audited) (Continued)

5. Options and performance rights granted as part of remuneration (continued)

(b) Options and performance rights with no linked performance criteria

Options were also issued to KMP with no performance criteria however included a service condition of between 1 to 10 years vesting period in tranches of varying time periods from the date of issue of the options to encourage the retention of staff. Details of these Options over ordinary shares in the Company are set out in the table below:

	Year	Options awarded during the year	Options vested during 2020	Options exercise d during 2020	Options forfeited during 2020	Options lapsed during 2020	Grant Date	End of Vesting Period	Fair value per option ^	Total Fair Value	Exercise price per option	Expiry date
		Number	Number	Number	Number	Number			US$	US$	US$	
L DiNardo	2016	-	5,750,000	-	-	-	28/09/2016	30/09/2020	$0.064	1,461,607	$0.172	30/09/2021
L DiNardo	2019	-	-	-	-	-	30/05/2019	30/05/2019	$0.104	780,000	$0.100	30/05/2029
A Osseiran [(1)]	2017	-	-	-	-	-	31/05/2017	01/02/2020	$0.118	118,423	$0.182	01/02/2024
E Hernandez	2017	-	2,000,000	-	-	-	7/07/2017	07/07/2020	$0.106	209,581	$0.125	07/07/2024
K Scarince	2019	-	2,500,000	-	-	-	11/03/2019	11/03/2023	$0.038	381,370	$0.047	11/03/2029
K Scarince	2019	-	4,375,000	-	-	-	11/03/2019	11/03/2023	$0.038	381,370	$0.047	11/03/2029
K Scarince	2020	4,000,000	-	-	-	-	10/08/2020	10/08/2024	$0.079	317,440	$0.125	06/08/2030
R Telson	2020	14,000,000	-	-	-	-	17/08/2020	17/08/2024	$0.112	1,563,831	$0.144	17/08/2030
R Levinson [(2)]	2019	-	7,375,000	-	14,625,000	-	18/03/2019	18/03/2029	$0.039	388,304	$0.042	18/03/2029

^ For details on valuation of the options issued in the current year, including models and assumptions used, please refer to Note 25.

(1) Mr Osseiran resigned and ceased to be a KMP effective 29 January 2020. The vesting of his options in the current year occurred after his resignation date as he has continued to provide services as Chair of the Scientific Advisory Board.

(2) Mr Levinson resigned from BrainChip effective 22 July 2020. The Company agreed to allow certain options to vest up to 31 December 2020 with all remaining unvested options to be forfeited.

No Performance Rights over ordinary shares in the Company provided as remuneration to KMPs, of which there are no performance conditions were on issue during the financial year.

REMUNERATION REPORT (Audited) (Continued)

6. Company performance and the link to remuneration

The actual remuneration earned by executives and non-executive directors during 2020 is set out in section 7 of this report. Shareholders can see the remuneration earned and the value ascribed to share-based payments which were vesting during the year. These share-based payment values were calculated at the date of grant using the Black Scholes model and the costs are expensed over the vesting period.

Remuneration in the form of share-based payments awarded to executives included service conditions and therefore in recognition of the service provided. However as noted in section 5 of this report, Mr DiNardo was awarded options in 2016 that were subject to specific performance criteria.

The adoption of BrainChip's 2018 LTIP gave the Board the ability to add performance criteria as appropriate to the specific terms as and when options or performance rights are offered to participants. The granting of options and performance rights is carried out to attain services and encourage retention and, is a performance incentive which allows executives to share the rewards of the success of the Company.

The table below shows information on the Group's earnings and movements in shareholder value for the past five years up to and including the current financial year.

	2020	2019	2018	2017	Restated 2016 (1)
Net loss after tax US$ million	26.82	11.31	16.52	13.77	5.10
Closing share price AUD	$0.430	$0.047	$0.105	$0.185	$0.28
Closing share price USD	$0.331	$0.033	$0.074	$0.144	$0.202
Loss per share (US cents)	1.76	0.95	1.64	1.59	0.69
Net tangible assets US cents per share	0.90	0.49	0.68	1.77	0.38

(1) 2016 results have been restated after the finalisation of the fair value of the acquisition of BrainChip SAS.

No dividends were issued in the past five years including the current financial year.

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements

Details for executive contractual arrangements for KMP are detailed below:

Name	Louis DiNardo
Title	Chief Executive Officer and Executive Director
Term of agreement	Open agreement with no fixed term
Details	Base fee of $400,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr DiNardo is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

Name	Peter van der Made
Title	Chief Technical Officer and Executive Director
Term of agreement	Open agreement with no fixed term
Details	Effective 1 July 2020, salary package of A$437,000 ($300,000 equivalent) inclusive of superannuation and employee benefits, practices, policies and programs provided by BrainChip Research Institute Pty Ltd ("BRIPL"). Prior to 1 July 2020, base fee of $300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr van der Made will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). No bonuses have been paid to date.
Termination	Terminated without cause or notice by either himself or BRIPL by giving 4 weeks notice. Termination without notice is applicable if there is serious misconduct or other specific clauses of the contract have been breached. Mr van der Made is entitled to 12 months' severance pay upon termination by BRIPL. at any time without cause. The amount is payable over 12 months from the date of termination.

Name	Anil Mankar
Title	Chief Development Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of $325,000 effective 1 September 2020 (previously $300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr Mankar will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. Mr Mankar received a cash bonus of $25,000 during the year.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Mankar is entitled to 24 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 24 months from the date of termination.

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Name	Ken Scarince
Title	Chief Financial Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of $300,000 effective 1 May 2020 (previously $250,000) plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr Scarince will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. No bonuses have been paid to date.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Scarince is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

Name	Robert Telson
Title	Vice President of Worldwide Sales
Term of agreement	Open agreement with no fixed term
Details	Base fee of $225,000, plus a variable component of $100,000 per year, of which the first six months component is guaranteed; plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr Telson will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. No bonuses have been paid to date.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc.

Name	Roger Levinson (ceased 22 July 2020)
Title	Chief Operating Officer
Term of agreement	Open agreement with no fixed term
Details	Base fee of $300,000 plus benefits under health and welfare benefit plans, practices, policies and programs provided by BrainChip Inc. Mr Levinson will be entitled to a cash bonus on such terms and conditions as determined from time to time by the Board (Annual Bonus). The Annual Bonus may be an amount up to fifty percent (50%) of the base salary in effect at the end of any fiscal year. No bonuses have been paid to date.
Termination	Terminated at any time with or without cause or notice by either himself or BrainChip Inc. Mr Levinson is entitled to 12 months' severance pay upon termination by BrainChip Inc. at any time without cause. The amount is payable over 12 months from the date of termination.

There are no other formalised KMP employment agreements.

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Remuneration of KMP

2020	Short Term		Post-Employment	Share-based Payment [10]	Termin-ation	Total	Perform-ance related
	Salary and Fees	Annual leave	Super-annuation	Equity Instruments			
	US$	US$	US$	US$	US$	US$	%
Non-Executive Directors							
E Hernandez [1]	86,811	-	-	92,735	-	179,546	-
S Liebeskind [2]	96,235	-	-	-	-	96,235	-
C Steele [3]	22,856	-	-	-	-	22,856	-
G Carrick [4]	7,290	-	-	-	-	7,290	-
A Osseiran [5]	5,639	-	-	6,828	-	12,467	-
Executive Directors							
L DiNardo	406,482	5,089	-	296,958	-	708,529	32%
P van der Made [6]	303,753	22,886	13,908	-	-	340,547	-
Other Key Management Personnel							
A Mankar [7]	348,041	11,827	8,550	-	-	368,418	7%
K Scarince	289,815	23,254	5,313	279,002	-	597,384	-
R Telson [8]	122,252	6,923	2,031	326,122	-	457,328	-
R Levinson [9]	177,751	12,959	-	(84,696)	80,830	186,844	-
Totals	**1,866,925**	**82,938**	**29,802**	**916,949**	**80,830**	**2,977,444**	

(1) Mr Hernandez agreed to forgo Chair fees totalling $31,252 (A$45,000) during the period from 1 January to 30 September 2020 whilst he was appointed Interim Chair.

(2) Mr Liebeskind agreed to defer the payment of director fees during the period from 1 January to 30 September 2020. An amount of $9,051 (A$11,750) was payable to Mr Liebeskind at 31 December 2020. He resigned as a Non-Executive effective 31 December 2020.

(3) Ms Steele was appointed Non-Executive Director on 14 September 2020.

(4) Mr Carrick was appointed Non-Executive Director on 23 November 2020.

(5) Mr Osseiran resigned as Non-Executive Director on 29 January 2020.

(6) Mr van der Made was appointed Executive Director on 29 January 2020.

(7) Mr Mankar was awarded a bonus of $25,000 during the year in recognition of his contribution to the development of the Akida chip. No other bonuses were awarded to KMPs during the year.

(8) Mr Telson became a KMP upon his employment effective from 10 August 2020.

(9) Mr Levinson resigned effective 22 July 2020.

(10) Share-based payment "remuneration" represents the current period expense in respect of options and performance rights issued, offset by the value of options and performance rights that have been forfeited during the year.

REMUNERATION REPORT (Audited) (Continued)

7. Executive contractual arrangements (continued)

Remuneration of KMP

2019	Short Term		Post-Employment	Share-based Payment [7]	Termin-ation	Total	Perform-ance related
	Salary and Fees [6]	Annual leave	Super-annuation	Equity Instruments			
	US$	US$	US$	US$	US$	US$	%
Non-Executive Directors							
S Wilks [1]	92,087	-	-	-	-	92,087	
S Liebeskind	78,884	-	-	-	-	78,884	-
E Hernandez	90,530	-	-	180,901	-	271,431	-
A Osseiran	71,130	-	-	77,625	-	148,755	-
J Stein [2]	27,528	-	-	(272,640)	-	(245,112)	-
Executive Directors							
L DiNardo	377,051	17,988	-	798,709	-	1,193,748	25%
Other Key Management Personnel							
A Mankar	292,259	20,747	8,344	-	-	321,350	-
P van der Made	291,671	20,747	-	-	-	312,418	-
R Levinson [3]	246,685	17,152	-	372,359	-	636,196	-
K Scarince [4]	207,833	14,571	3,750	342,411	-	568,565	-
R Beachler [5]	106,809	5,214	3,028	(786,349)	-	(671,298)	-
Totals	**1,882,467**	**96,419**	**15,122**	**713,016**	**-**	**2,707,024**	

(1) Mr Wilks was appointed Non-Executive Director and Chair on 11 February 2019. Options awarded to Mr Wilks during 2019 were forfeited upon his resignation with no financial impact.

(2) Ms Stein resigned effective 1 April 2019. Unvested options were forfeited upon her resignation.

(3) Mr Levinson was appointed 18 March 2019

(4) Mr Scarince was appointed 11 March 2019.

(5) Mr Beachler ceased to be KMP upon his resignation, effective 3 May 2019.

(6) No bonuses were awarded to any KMP during 2019.

(7) Share-based payment "remuneration" represents the current period expense in respect of options and performance rights issued, offset by the value of options and performance rights that have been forfeited during the year.

REMUNERATION REPORT (Audited) (Continued)

8. Equity Instruments Disclosure

Shareholdings of KMP (including nominees)

Shares held in BrainChip Holdings by KMP are summarised as follows:

	Balance held at 1 January 2020	Acquired / Disposed	Shares issued as remuneration	Net change other [(2)]	Balance held at 31 December 2020
Directors					
E Hernandez	-	-	-	-	-
L DiNardo	11,779,362	-	-	-	11,779,362
P van der Made	176,305,508	-	-	-	176,305,508
S Liebeskind [(1)]	11,649,242	-	-	(11,649,242)	-
C Steele	-	-	-	-	-
G Carrick	-	-	-	-	-
A Osseiran	9,338,500	-	-	(9,338,500)	-
Other KMPs					
A Mankar [(3)]	121,885,000	(6,295,167)	-	-	115,589,833
K Scarince	-	-	-	-	-
R Telson	-	-	-	-	-
R Levinson	-	-	-	-	-
Total	330,957,612	(6,295,167)	-	(20,987,742)	303,674,703

(1) Shares held indirectly comprise 2,310,742 fully paid shares in the name of Crossfield Intech Nominees Pty Ltd and 9,338,500 fully paid shares via Crossfield Intech Nominees Pty Ltd as trustee for the Liebeskind Family Superfund. Mr Liebeskind ceased being a KMP effective 31 December 2020.

(2) Shares held indirectly by Adam Osseiran and Rebecca Osseiran-Moisson ATF the Osseiran Family Trust. Mr Osseiran ceased being a KMP effective 29 January 2020.

(3) 92,839,833 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Ltd on behalf of Mr Mankar.

Options holdings of Key Management Personnel (including nominees)

The table below summarises the options granted to KMPs and exercised during the current year. Refer to section 5 for the terms of the options granted to KMP in the current and prior years. There were no alterations to the terms and conditions of options awarded as remuneration since their award date. No options were lapsed during the current year.

	Balance at beginning of period 1 January 2020	Granted as remuner-ation	Exercised	Net change other [(2)]	Balance at end of period 31 December 2020	Vested and not exercise-able	Vested and exercisable
Directors							
E Hernandez	8,000,000	-	-	-	8,000,000	-	6,000,000
L DiNardo	57,500,000	-	-	-	57,500,000	-	49,250,000
P van der Made	-	-	-	-	-	-	-
S Liebeskind [(1)]	6,000,000	-	-	(6,000,000)	-	-	-
C Steele	-	-	-	-	-	-	-
G Carrick	-	-	-	-	-	-	-
A Osseiran [(2)]	4,000,000	-	-	(4,000,000)	-	-	-
Other KMPs							
A Mankar	-	-	-	-	-	-	-
K Scarince	20,000,000	4,000,000	-	-	24,000,000	-	6,875,000
R Telson	-	14,000,000	-	-	14,000,000	-	-
R Levinson [(2)]	22,000,000	-	-	(22,000,000)	-	-	-
Total	117,500,000	18,000,000	-	(32,000,000)	103,500,000	-	62,125,000

(1) Mr Liebeskind held 3,000,000 options directly and 3,000,000 indirectly via Crossfield Intech Nominees Pty Ltd as trustee for the Liebeskind Family Superfund. Mr Liebeskind ceased being a KMP effective 31 December 2020.

(2) Both Mr Osseiran and Mr Levinson ceased being a KMP on 29 January 2020 and 22 July 2020 respectively.

REMUNERATION REPORT (Audited) (Continued)

9. Other transactions and balances with KMP

There were no other transactions with other Key management personnel have been incurred, other than reported above.

End of Audited Remuneration Report.

INDEMNIFICATION AND INSURANCE OF DIRECTORS AND OFFICERS

During the financial year, the Company paid a premium in respect to a contract of insurance to insure directors and officers of the Company and related bodies corporate against those liabilities for which insurance is permitted under section 199B of the *Corporations Act 2001*. Disclosure of the nature of the liabilities and the amount of the premium is prohibited under the conditions of the contract of insurance.

INDEMNIFICATION OF AUDITORS

To the extent permitted by law, the Company has agreed to indemnify its auditors, Ernst & Young, as part of the terms of its audit engagement agreement against claims by third parties arising from the audit (for an unspecified amount). No payment has been made to indemnify Ernst & Young during or since the financial year.

AUDITOR INDEPENDENCE

The Directors received the Independence Declaration, as set out on page 26, from Ernst & Young.

NON-AUDIT SERVICES

No non-audit services were provided by the entity's auditor, Ernst & Young during the current and the prior year.

Signed in accordance with a resolution of the Directors.

Emmanuel Hernandez
Chair
California, U.S.A., 24 February 2021

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Fax: +61 8 9429 2436
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Auditor's independence declaration to the directors of BrainChip Holdings Ltd

As lead auditor for the audit of the financial report of BrainChip Holdings Ltd for the financial year ended 31 December 2020, I declare to the best of my knowledge and belief, there have been:

a. No contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and

b. No contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of BrainChip Holdings Ltd and the entities it controlled during the financial year.

Ernst & Young

Ernst & Young

J K Newton

J K Newton
Partner
25 February 2021

Consolidated Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2020

	Note	31 December 2020 $US	31 December 2019 $US
Continuing operations			
Revenue from contracts with customers	5	120,829	75,574
Cost of goods sold		(48,616)	-
Gross profit		72,213	75,574
Research & development expenses	6(a)	(5,152,239)	(4,511,410)
Selling & marketing expenses	6(b)	(1,426,501)	(1,061,595)
General & administrative expenses	6(c)	(3,227,647)	(3,795,200)
Share-based payment expense	25(a)	(1,435,645)	(1,636,113)
Operating Loss		(11,169,819)	(10,928,744)
Finance income	7(a)	27,453	66,571
Finance expense	7(b)	(5,541,909)	(612,945)
Fair value (loss)/gain through profit and loss	7(c)	(10,137,774)	165,056
Loss from continuing operations before income tax		(26,822,049)	(11,310,062)
Income tax expense	9(c)	-	-
Loss from continuing operations after income tax		(26,822,049)	(11,310,062)
Net loss for the year		(26,822,049)	(11,310,062)
Other comprehensive income/(loss)			
Other comprehensive income not to be reclassified to profit or loss in subsequent periods (net of tax):			
Remeasurement (losses)/gains on defined benefit plans		(24,364)	(16,990)
Items that may be reclassified subsequently to profit or loss (net of tax):			
Exchange differences on translation of foreign operations		42,137	(7,723)
Other comprehensive income for the year, net of tax		17,773	(24,713)
Total comprehensive loss for the year, net of tax		(26,804,276)	(11,334,775)
		US cents per share	**US cents per share**
Loss per share attributable to ordinary equity holders of the Company			
Basic loss per share	10	(1.76)	(0.95)
Diluted loss per share	10	(1.76)	(0.95)

The above consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

Consolidated Statement of Financial Position
As at 31 December 2020

	Note	31 December 2020 $US	31 December 2019 $US
CURRENT ASSETS			
Cash and cash equivalents	11	19,136,425	7,622,178
Trade and other receivables	12	907,680	1,187,512
Financial asset	19	1,470,275	-
Inventory		54,399	16,021
Other assets		127,791	135,534
Total current assets		21,696,570	8,961,245
NON-CURRENT ASSETS			
Right-of-use assets	13	98,056	191,460
Plant and equipment	14	149,316	178,883
Intangible assets and goodwill	15	1,710,642	1,776,113
Other assets		40,311	34,801
Total non-current assets		1,998,325	2,181,257
TOTAL ASSETS		23,694,895	11,142,502
CURRENT LIABILITIES			
Trade and other payables	16	927,271	471,284
Deferred revenue		13,441	-
Financial liabilities	19	3,500,434	736,932
Lease liabilities	18	51,136	102,362
Employee benefits liabilities	17	420,156	280,801
Other		635,049	-
Total current liabilities		5,547,487	1,591,379
NON-CURRENT LIABILITIES			
Financial liabilities	19	166,116	222,667
Lease liabilities	18	48,088	90,691
Defined benefit plan	20	203,868	141,415
Total non-current liabilities		418,072	454,773
TOTAL LIABILITIES		5,965,559	2,046,152
NET ASSETS		17,729,336	9,096,350
EQUITY			
Contributed equity	22(a)	98,741,885	64,740,268
Share-based payments reserve	23	19,854,509	18,418,864
Foreign currency translation reserve	23	114,940	72,803
Other equity reserve	23	247,872	247,872
Accumulated losses	24	(101,229,870)	(74,383,457)
TOTAL EQUITY		17,729,336	9,096,350

The above consolidated statement of financial position should be read in conjunction with the accompanying notes.

Consolidated Statement of Cash Flows
For the year ended 31 December 2020

	Note	31 December 2020 US$	31 December 2019 US$
CASH FLOWS USED IN OPERATING ACTIVITIES			
Receipts from customers		55,207	186,142
Payments to suppliers and employees		(10,544,627)	(9,583,435)
Interest received		27,453	80,054
Interest paid		(4,214)	(9,804)
Grants and R&D credits received from third parties		437,205	325,608
Net cash flows used in operating activities	11	(10,028,976)	(9,001,435)
CASH FLOWS USED IN INVESTING ACTIVITIES			
Payments for property, plant and equipment		(44,241)	(39,673)
Payments for purchase of patents and licenses		-	(119,826)
Net cash flows used in investing activities		(44,241)	(159,499)
CASH FLOWS FROM FINANCING ACTIVITIES			
Receipts from the issue of shares		1,989,896	7,394,000
Payment of share issue costs		(214,823)	(484,150)
Receipts from the exercise of unlisted options		3,381,641	-
Subscription proceeds received under the LDA Capital put	19(d)	7,536,236	-
Receipts from the exercise of unlisted options – LDA Capital	19(d).	7,570,156	-
Proceeds from the reduction of collateral share holdings	12(a)	910,971	-
Receipt from the issue of Convertible Securities	19(c)	-	2,565,000
Payment of Convertible Securities costs	19(c)	(2,833)	(30,454)
Proceeds from loans from third parties	19(b)	412,300	-
Repayment of loans to third parties	19(a)	-	(2,193)
Payment to reduce lease liabilities	18	(106,984)	(223,779)
Net cash flows generated from financing activities		21,476,560	9,218,424
Net increase in cash and cash equivalents		11,403,343	57,490
Net foreign exchange differences		110,904	21,362
Cash at the beginning of the financial period		7,622,178	7,543,326
Cash and cash equivalents at the end of the period	11	19,136,425	7,622,178

The above consolidated cash flow statement should be read in conjunction with the accompanying notes.

Consolidated Statement of Changes in Equity
For the year ended 31 December 2020

	Contributed equity US$	Share-based payment reserve US$	Other reserves US$	Foreign currency reserve US$	Accumulated losses US$	Total equity US$
At 1 January 2019	55,143,789	16,463,527	247,872	80,526	(63,056,405)	8,879,309
Loss for the year	-	-	-	-	(11,310,062)	(11,310,062)
Other comprehensive loss	-	-	-	(7,723)	(16,990)	(24,713)
Total comprehensive loss for the period	-	-	-	(7,723)	(11,327,052)	(11,334,775)
Issue of share capital	9,056,810	-	-	-	-	9,056,810
Converted treasury shares	1,023,821	-	-	-	-	1,023,821
Share issue costs	(484,152)	-	-	-	-	(484,152)
Share-based payment – Note 25(a)	-	1,955,337	-	-	-	1,955,337
At 31 December 2019	64,740,268	18,418,864	247,872	72,803	(74,383,457)	9,096,350

	Contributed equity US$	Share-based payment reserve US$	Other reserves US$	Foreign currency reserve US$	Accumulated losses US$	Total equity US$
At 1 January 2020	64,740,268	18,418,864	247,872	72,803	(74,383,457)	9,096,350
Loss for the year	-	-	-	-	(26,822,049)	(26,822,049)
Other comprehensive loss	-	-	-	42,137	(24,364)	17,773
Total comprehensive loss for the period	-	-	-	42,137	(26,846,413)	(26,804,276)
Issue of share capital	32,781,966	-	-	-	-	32,781,966
Converted treasury shares	1,463,743	-	-	-	-	1,463,743
Share issue costs	(244,092)	-	-	-	-	(244,092)
Share-based payment – Note 25(a)	-	1,435,645	-	-	-	1,435,645
At 31 December 2020	98,741,885	19,854,509	247,872	114,940	(101,229,870)	17,729,336

The above consolidated statement of changes of equity should be read in conjunction with the accompanying notes.

1. CORPORATE INFORMATION

The annual financial report of BrainChip Holdings Ltd ("Company") and its controlled entities ("Consolidated Entity" or "Group") for the year ended 31 December 2020 was authorised for issue in accordance with a resolution of the Directors on 24 February 2021, California, U.S.A.

BrainChip Holdings is a for-profit Company limited by shares, incorporated and domiciled in Australia, and whose shares are publicly traded on the Australian Securities Exchange.

The address of the registered office is Level 12, 225 George Street, Sydney NSW 2000, Australia.

The nature of the operations and principal activities of the Group are described in the Directors' Report.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation

The financial report is a general purpose financial report, which has been prepared in accordance with the requirements of the *Corporations Act 2001* and Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board. The financial report has been prepared on a historical cost basis except for certain financial assets and liabilities that have been measured at fair value.

Notwithstanding the operating loss and the net operating cash outflows recognised in the current year, the Directors are confident that the Company will continue operating as a going concern based on the current available cash resources.

The financial report is presented in US dollars, being the functional currency of the Company.

New standards, interpretation and amendments adopted by the Group

The Group applied for the first time all new and amended Accounting Standards and Interpretations, which are effective for annual periods beginning 1 January 2020. Although these new and amended standards and Interpretations applied for the first time in 2020, they did not have a material impact on the annual consolidated financial statements of the Group.

Amendments to AASB 3: *Definition of a Business*

The amendment to AASB 3 clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. Furthermore, it clarified that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on the consolidated financial statements of the Group but may impact future periods should the Group enter into any business combinations.

(b) Statement of compliance

The financial report complies with Australian Accounting Standards as issued by the Australian Accounting Standards Board. The financial report also complies with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

The following Standards and Interpretations have been issued by the AASB, are relevant to the Group, but are not yet effective and have not been adopted by the Group for the period ending 31 December 2020. Unless otherwise stated, the Group has yet to fully assess the impact of these Standards and Interpretations when applied in future periods.

Reference	Summary	Application date of standard	Application date for Group
AASB 2020-8 *Amendment to AASs – Interest Rate Benchmark Reform – Phase 2*	The second phase of the project in addressing the financial reporting effects of IBOR reform has been completed recently. This phase focuses on issues that might affect financial reporting upon replacement of existing interest rate benchmarks, and amends the requirements in AASB 9, AASB 139, AASB 7, AASB 4 Insurance Contracts and AASB 16 Leases. The objective of the amendments is to minimise financial reporting consequences of a change in benchmark interest rates that Australian Accounting Standards may otherwise require, such as the derecognition or remeasurement of financial instruments, and the discontinuation of hedge accounting. Provided that the interest rate will be substantially similar before and after the replacement, the amendments: • Require changes to future cash flows that are directly required by the IBOR reform to be treated as if they were changes to a floating interest rate. Applying this expedient would not affect the carrying amount of the financial instrument. It also relieves entities of the need to assess whether modification or derecognition accounting applies under AASB 9 and AASB 139. • Require changes to lease payments that are directly required by the IBOR reform to be accounted for as a remeasurement of lease liability using the original discount rate with a corresponding adjustment to the	1 January 2021	1 January 2021

Reference	Summary	Application date of standard	Application date for Group
	right-of-use asset. This expedient exempts entities from remeasuring the lease liability using a new discount rate under AASB 16. Entities are required to provide disclosures that help readers understand the effect of the IBOR reform on the financial statements and risk management strategies, including the progress in completing the transition to alternative benchmark rates and how such transition is being managed. These amendments apply retrospectively. However, restatement of prior periods is not required but permitted only if such restatement is possible without the use of hindsight.		
AASB 2020-3 *Amendment to AASB 9 – Fees in the '10 per cent' Test for Derecognition of Financial Liabilities*	Under AASB 9, an existing financial liability that has been modified or exchanged is considered extinguished when the contractual terms of the new liability are substantially different, measured by the "10 per cent" test. That is, when the present value of the cash flows under the new terms, including any fees paid or received, is at least 10 per cent different from the present value of the remaining cash flows of the original financial liability. The amendment to AASB 9 clarifies that fees included in the 10 per cent test are limited to fees paid or received between the borrower and the lender, including amounts paid or received by them on the other's behalf. When assessing the significance of any difference between the new and old contractual terms, only the changes in contractual cash flows between the lender and borrower are relevant. Consequently, fees incurred on the modification or exchange of a financial liability paid to third parties are excluded from the 10 per cent test. These amendments are applied prospectively. Earlier application is permitted.	1 January 2022	1 January 2022
AASB 2020-3 *Amendments to AASB 3 – Reference to the Conceptual Framework*	The IASB's assessment of applying the revised definitions of assets and liabilities in the Conceptual Framework to business combinations showed that the problem of day 2 gains or losses would be significant only for liabilities that an acquirer accounts for after the acquisition date by applying IAS 37 Provisions, Contingent Liabilities and Contingent Assets or IFRIC 21 Levies. The Board updated IFRS 3 in May 2020 for the revised definitions of an asset and a liability and excluded the application of the Conceptual Framework to liabilities and contingent liabilities within the scope of IAS 37 or IFRIC 21. The AASB released the equivalent amendments to AASB 3 in June 2020. These amendments are applied prospectively.	1 January 2022	1 January 2022
AASB 2020-1 *Amendments to AASs – Classification of Liabilities as Current or Non-current*	A liability is classified as current if the entity has no right at the end of the reporting period to defer settlement for at least 12 months after the reporting period. The AASB recently issued amendments to AASB 101 to clarify the requirements for classifying liabilities as current or non-current. Specifically: • The amendments specify that the conditions which exist at the end of the reporting period are those which will be used to determine if a right to defer settlement of a liability exists. • Management intention or expectation does not affect classification of liabilities. • In cases where an instrument with a conversion option is classified as a liability, the transfer of equity instruments would constitute settlement of the liability for the purpose of classifying it as current or non-current. These amendments are applied retrospectively.	1 January 2023	1 January 2023

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(c) Basis of consolidation

The consolidated financial statements comprise the financial statements of the parent entity and its subsidiaries (the 'Group') as at 31 December each year. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-Group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

(d) Foreign currency translation

(i) Functional and presentation currency

The functional currency of each entity within the Group is the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in United States Dollars which is the parent entity's functional and presentation currency. The United States Dollar is also the functional currency of all subsidiaries in the Group except for BrainChip SAS which has a functional currency of Euros, BrainChip Research Institute Pty Ltd with a functional currency of AUD and BrainChip Systems India Private Limited which has a functional currency of Indian Rupee.

(ii) Transactions and balances

Transactions in foreign currencies are initially recorded in the functional currency by applying the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange at the reporting date.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate as at the date of the initial transaction. All exchange differences arising from the above policies are recognised in the profit and loss.

(iii) Translations of subsidiary Companies' functional currency to presentation currency

The results of non-US$ reporting subsidiaries, if any, are translated into United States Dollars (presentation currency). Income and expenses are translated at the average exchange rates for the month. Assets and liabilities are translated at the closing exchange rate for each balance sheet date. Share capital, reserves and accumulated losses are converted at applicable historical rates.

Exchange variations resulting from the translation are recognised in the foreign currency translation reserve in equity. On consolidation, exchange differences arising from the translation of monetary items considered to be part of the net investment in subsidiaries are taken to the foreign currency translation reserve. If a subsidiary were sold, the proportionate share of the foreign currency translation reserve would be transferred out of equity and recognised in the statement of comprehensive income.

(e) Operating segments

An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity), whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance and for which discrete financial information is available. This includes start-up operations which are yet to earn revenues. Management will also consider other factors in determining operating segments such as the existence of a line manager and the level of segment information presented to the board of directors.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(f) Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at bank and in hand and short-term deposits that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purposes of the Statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(g) Trade and other receivables

A receivable represents the Group's right to an amount of consideration that is unconditional (i,e. only the passage of time is required before payment of the consideration is due).

Trade receivables are initially measured at transaction value and other receivables are initially recognised at fair value plus transaction costs. Trade and other receivables are subsequently measured at amortised cost using the effective interest method, less any provision for impairment. Trade receivables generally have 30-60 day payment terms.

Refer Note 2(h)(i) below for the accounting policy related to financial assets at fair value through profit or loss reported in other receivables.

Collectability of trade and other receivables is reviewed on an ongoing basis in accordance with the expected credit loss ("ECL") model.

(h) Financial instruments – initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

i) Financial assets

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI) and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under AASB 15. Refer to the accounting policies in section (p) Revenue from contracts with customers.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows while financial assets classified and measured at fair value through OCI are held within a business model with the objective of both holding to collect contractual cash flows and selling.

Gains and losses on initial recognition.

When the transaction price of a financial asset differs from the fair value on initial recognition and the fair value is evidenced by a quoted price in an active market for an identical asset or based on a valuation technique that uses only data from observable markets, the difference between the transaction price and fair value is recognised immediately in profit or loss. If fair value is based on models for which some of the inputs are not observable, the difference between the transaction price and the fair value is deferred and recognised in profit or loss when the inputs become observable or when realised through settlement.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired. The Group's financial assets at amortised cost includes trade receivables and other receivables.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(h) Financial instruments – initial recognition and subsequent measurement (continued)

Financial assets at fair value through OCI (debt instruments)

For debt instruments at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the statement of profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value change recognised in OCI is recycled to profit or loss.

The Group's debt instruments at fair value through OCI includes investments in quoted debt instruments included under other current financial assets.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under IAS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument -by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired, or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment

Further disclosures relating to impairment of financial assets are also provided in the following notes:

- Disclosures for significant assumptions Note 3,
- Trade receivables Note 12.

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(h) Financial instruments – initial recognition and subsequent measurement (continued)

ii) Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Group's financial liabilities include trade and other payables, Convertible Securities recognised as financial liabilities, and derivative financial instruments.

Subsequent measurement

For purposes of subsequent measurement, financial liabilities are classified in two categories:

- Financial liabilities at fair value through profit or loss
- Financial liabilities at amortised cost (loans and borrowings)

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include embedded derivatives designated upon initial recognition as at fair value through profit or loss.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in AASB 9 are satisfied.

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit or loss.

Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit or loss.

iii) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

(i) Property, plant and equipment

Plant and equipment is stated at historical cost less accumulated depreciation.

Capital work-in-progress is stated at cost and comprises all costs directly attributable to bringing the assets under construction ready to their intended use. Capital work-in-progress is transferred to property, plant and equipment at cost on completion.

Depreciation is calculated on a straight-line basis over the estimated useful life of the asset which ranges between 3 and 25 years.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in the statement of comprehensive income in the period the item is derecognised.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(j) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses. Internally generated intangibles, excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred. The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives are not amortised, but are tested for impairment annually, either individually or at the cash-generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit or loss when the asset is derecognised.

(k) Research and development costs

Research costs are expensed as incurred. Development expenditures on an individual project are recognised as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that the asset will be available for use or sale;
- its intention to complete and its ability and intention to use or sell the asset;
- how the asset will generate future economic benefits;
- the availability of resources to complete the asset; and
- the ability to measure reliably the expenditure during development.

Following initial recognition of the development expenditure as an asset, the asset is carried at cost less any accumulated amortisation and accumulated impairment losses. Amortisation of the asset begins when development is complete and the asset is available for use. It is amortised over the period of expected future benefit. Amortisation is recorded in profit and loss. During the period of development, the asset is tested for impairment annually.

Patents and licences

The Group made upfront payments to purchase patents and licences. The patents have been granted for a period of 20 years by the relevant government agency with the option of renewal at the end of this period.

A summary of the policies applied to the Group's intangible assets is, as follows:

	PATENTS	DEVELOPMENT COSTS
USEFUL LIFE	Finite (5 - 20 years)	Finite (5 - 20 years)
AMORTISATION METHOD	Amortised on a straight-line basis over the period of the patent	Amortised on a straight-line basis over the period of expected future sales from the related project

(l) Trade and other payables

Trade payables and other payables are carried at amortised cost and are not discounted due to their short-term nature. They represent liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured and usually paid within 30 days of recognition.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(m) Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the reporting date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision resulting from the passage of time is recognised in finance costs.

(n) Issued capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(o) Share-based payment transactions

The Group provides benefits to employees, consultants and service providers (including Directors) ("eligible participants") in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares (equity-settled transactions).

The 2018 LTIP was adopted by shareholders on 10 May 2018. The Company had share options and performance rights that were issued under the plans current at the time of offer (Performance Rights Plan, 2015 Long Term Incentive Plan and Directors and Officers Option Plan) however all new awards post 10 May 2018 have been issued under the 2018 LTIP.

The cost of these equity-settled transactions to employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined by using a Black Scholes model, further details of which are given in Note 25.

In valuing equity-settled transactions, no account is taken of any vesting conditions, other than conditions linked to the price of the shares of the Company (market conditions) if applicable.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled (the vesting period), ending on the date on which the relevant employees become fully entitled to the award (the vesting date).

At each subsequent reporting date until vesting, the cumulative charge to the statement of comprehensive income is the product of (i) the grant date fair value of the award; (ii) the current best estimate of the number of awards that will vest, taking into account such factors as the likelihood of employee turnover during the vesting period and the likelihood of non-market performance conditions being met; and (iii) the expired portion of the vesting period.

The charge to the statement of comprehensive income for the period is the cumulative amount as calculated above less the amounts already charged in previous periods. There is a corresponding credit to equity.

Until an award has vested, any amounts recorded are contingent and will be adjusted if more or fewer awards vest than were originally anticipated to do so. Any award subject to a market condition is considered to vest irrespective of whether or not the market condition is fulfilled, provided that all other conditions are satisfied.

If a non-vesting condition is within the control of the Group, Company or the eligible participant, the failure to satisfy the condition is treated as a cancellation. If a non-vesting condition within the control of neither the Group, Company nor eligible participant is not satisfied during the vesting period, any expense for the award not previously recognised is recognised over the remaining vesting period, unless the award is forfeited.

If the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. An additional expense is recognised for any modification that increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee, as measured at the date of modification.

If an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new award are treated as if they were a modification of the original award, as described in the previous paragraph.

Share-based payments to non-employees are measured at the fair value of goods or services received or the fair value of the equity instruments issued if it is determined the fair value of the goods or services cannot be reliably measured and are recorded at the date the goods or services are received.

The dilutive effect, if any, of outstanding options is reflected as additional share dilution in the computation of earnings per share.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(p) Employee benefits

(i) Wages, salaries and annual leave

A liability is recognised for benefits accruing to employees in respect of wages and salaries in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

(ii) Superannuation

Contributions made by the Group to employee superannuation funds, which are defined contribution plans, are charged as an expense when incurred.

(iii) Defined benefit plan

The Group's net obligation in respect of defined benefits plans is calculated by estimating the discounted amount of future benefit that employees have earned in the current and prior periods. The calculation of defined benefit plan obligations is performed annually by a qualified actuary using the projected unit credit method, taking into account staff turnover and mortality probability.

Re-measurements of the net defined benefit liability, which comprise actuarial gains and losses, are recognised immediately in OCI. The Group determines the net interest expense on the defined benefit liability for the period by applying the discount rate used to measure the net defined benefit obligation. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss.

(q) Revenue from contracts with customers

The Group accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of the consideration is probable.

Revenues from license and product sales are recognised when an identified performance obligation is satisfied, and the customer obtains and accepts control of the Company's product. This means that the customer can direct the use, and obtain substantially all of the remaining benefits, from the use of the license and product. Sales of product and licenses generally occur at a point in time, typically upon delivery to the customer. In instances where the Group has significant obligations to maintain or update licences, the revenue is recognised over time.

Revenue from development service is generally recognised as the Company creates or enhances an asset that the customer controls.

The Group determined that the input method is the best method in measuring progress of the development services revenue because there is a direct relationship between the Group's effort (i.e., labour hours incurred) and the transfer of service to the customer. The Group recognises revenue on the basis of the time lapsed as a percentage compared to total expected service.

Taxes collected from customers relating to product and service sales and remitted to governmental authorities are excluded from revenues. The Company expenses incremental costs of obtaining a contract as and when incurred because the expected amortisation period of the asset that the Company would have recognised is one year or less.

(r) Government grants

Government grants are recognised where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognised as a credit on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognised as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual instalments.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(s) Income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided for using the full liability, balance sheet method.
Deferred income tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- when the taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised, except:

- when the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- when the deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Unrecognised deferred income tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.
Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Income taxes relating to items recognised directly in equity are recognised in equity and not in the Statement of comprehensive income.

Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to the same taxable entity and the same taxation authority.

(t) Other taxes

Revenues, expenses and assets are recognised net of the amount of GST except:

- when the GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables, which are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position.

Cash flows are included in the statement of cash flows on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority are classified as operating cash flows.

Commitments and contingencies are disclosed net of amounts of GST recoverable from, or payable to, the taxation authority.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

(u) Earnings per share

Basic earnings per share is calculated as net profit attributable to members of the parent, adjusted to exclude any costs of servicing equity (other than dividends) and preference share dividends, divided by the weighted average number of ordinary shares, adjusted for any bonus element.

Diluted earnings per share are calculated as net profit attributable to members of the parent adjusted for:

- cost of servicing equity (other than dividends) and preference share dividends;
- the after tax effect of dividends and interest associated with dilutive potential ordinary shares that have been recognised as expenses; and
- other non-discriminatory changes in revenues or expenses during the period that would result from the dilution of potential ordinary shares;

divided by the weighted average number of ordinary shares and dilutive potential ordinary shares, adjusted for any bonus element.

3. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its judgements and estimates on historical experience and on other various factors it believes to be reasonable under the circumstances, the result of which form the basis of the carrying values of assets and liabilities that are not readily apparent from other sources.

Management has identified the following critical accounting policies for which significant judgements, estimates and assumptions are made. Actual results may differ from these estimates under different assumptions and conditions and may materially affect financial results or the financial position reported in future periods.

Further details of the nature of these assumptions and conditions may be found in the relevant notes to the financial statements.

- **Revenue from contracts with customers**

  Judgement was applied in determining whether applicable contracts were considered a contract with a customer, where goods and/or services are delivered in exchange for consideration, or a co-development agreement where the risks and benefits that result from the activity are shared. In all instances, management concluded that a contract with a customer had been negotiated and AASB 15 was applicable.

  The revenue recognition standard states that if a contract has more than one performance obligation, judgement is required in determining the allocation of the transaction price to each performance obligation (or distinct good and service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

  Determining the performance obligation in a contract comprising license revenue and development service revenue
  The Group determined that both license and development service revenue is capable of being distinct and identifiable in a specific contract, comprising the delivery of the perpetual license and the engineering services provided to specifically enhance the license to the specifications of the customer.

  Determining the timing of satisfaction of the development service revenue
  The Group concluded that development service revenue is to be recognised over time because the customer simultaneously receives and consumes the benefits provided by the Group; BrainChip is enhancing an asset that the customer controls, and the work completed does not create an alternative use to the Group.

  The Group determined that the input method is the best method in measuring progress of the development services revenue because there is a direct relationship between the Group's effort (i.e., labour hours incurred) and the transfer of service to the customer. The Group recognises revenue on the basis of the labour hours expended relative to the total expected labour hours to complete the service.

- **Share-based payment transactions**

  The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by using a Black Scholes model, using the assumptions as discussed in Note 25. The accounting estimates and assumptions relating to equity-settled share-based payments would have no impact on the carrying amounts of assets and liabilities in the next annual reporting period but may impact expenses and equity.

3. SIGNIFICANT ACCOUNTING JUDGEMENTS, ESTIMATES AND ASSUMPTIONS (Continued)

- **Impairment of non-financial assets other than goodwill**

  The Group assesses all non-financial assets other than goodwill for impairment at each reporting date by evaluating the carrying value of the asset against the recoverable amount, which is the higher of fair value less costs to sell and its value in use. This requires assessment of conditions specific to the Group and to the particular asset which may lead to an impairment being recognised.

- **Goodwill**

  Goodwill arises on the acquisition of a business. Goodwill is not amortised. Instead, goodwill is tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired and is carried at cost less accumulated impairment losses. Impairment losses on goodwill are taken to profit or loss and are not subsequently reversed.

- **Impairment of goodwill**

  The Group is organised into one operating segment, being the technological development of designs that can be licensed to original equipment manufacturer and semiconductor manufacturers of chips based on artificial neural networks. All the activities of the Group are interrelated, and each activity is dependent on the others. As such, BrainChip has only one cash generating unit and, therefore goodwill has been allocated to, and the impairment testing is performed at, the consolidated level. The recoverable amount of goodwill has been assessed utilising fair value less cost of disposal, using a market comparison approach based on the market capitalisation of the Group at balance sheet date. This approach was supported by external sources of information, being recent transactions within the semiconductor industry that have provided evidence that fair value exceeds market capitalisation (i.e. purchase consideration exceeds market capitalisation), as well as internal information including the high liquidity of the Group's shares.

- **Development costs**

  The Group capitalises development costs for a project in accordance with the accounting policy. Initial capitalisation of costs is based on management's judgement that technological and economic feasibility is confirmed. In determining the amounts to be capitalised, management makes assumptions regarding the expected future cash generation of the project, discount rates to be applied and the expected period of benefits. At 31 December 2020, the carrying amount of capitalised development costs was $Nil (2019: $Nil).

- **Defined benefit plans**

  The cost of the defined benefit pension plan and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These includes the determination of the discount rate, future salary growth, mortality rates and employee turnover rate. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. Further details about defined benefit plans are provided in Note 20.

- **Fair value measurement of financial instruments**

  When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the monte carlo model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments. See Note 19 for further disclosure.

Further details of the nature of these assumptions and conditions may be found in the relevant notes to the financial statements.

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

Overview

This note presents information about the Group's exposure to credit, liquidity and market risks, its objectives, policies and processes for measuring and managing risk, and the management of capital.

Other than derivatives associated with the Put Option Premium and Convertible Securities described in Note 19, the Group does not use any form of derivatives as it is not at a level of exposure that requires the use of derivatives to hedge its exposure. Exposure limits are reviewed by management on a continuous basis. The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework. Management monitors and manages the financial risks relating to the operations of the Group through regular reviews of the risks.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Group's cash and cash equivalents and receivables from customers.

Presently, the Group undertakes technology development activities in the USA, Australia, India and France and is exposed to credit risk from its operating activities (primarily trade and other receivables).

Cash and cash equivalents and investment securities

The Group limits its exposure to credit risk by only investing in liquid securities and only with counterparties that have an acceptable credit rating.

Trade and other receivables

The Group operates primarily in technology development and has trade receivables. There is risk that these receivables may not be recovered however the Group does not consider this to be likely. The Group reviews the collectability of trade and other receivables on an ongoing basis and measures the expected credit loss at each reporting date (see Note 12).

Credit risk associated with Other receivables related to the sale of collateral shares and the Financial asset is considered low due to its short-term nature and is ability to offset the receivable against any outstanding liability recognised in relation to the Convertible Securities and the Put Option Premium.

Exposure to credit risk

The carrying amount of the Group's financial assets represents the maximum credit exposure. The Group's maximum exposure to credit risk at the reporting date was:

		Carrying amount	
		2020	**2019**
	Note	**US$**	**US$**
Cash and cash equivalents	11	19,136,425	7,622,178
Trade and other receivables	12	907,680	1,187,512
Financial asset	19	1,470,275	-

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows. The Group entered into Convertible Securities during 2019 which terminated in 2020. Further, the Group entered into a Put Option Agreement in August 2020 resulting in cash inflows to the Group.

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Liquidity risk (continued)

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements:

	Carrying amount US$	Contractual cash flows US$	6 mths or less US$	6-12 mths US$	1-5 years US$
31 December 2020					
Trade and other payables	927,271	927,271	927,271	-	-
Financial liabilities [(1)]	486,794	501,086	-	332,193	168,893
Lease liabilities	99,224	100,909	26,324	26,324	48,261
	1,513,289	1,529,266	953,595	358,517	217,154
31 December 2019					
Trade and other payables	471,284	471,284	471,284	-	-
Financial liabilities	959,599	1,214,060	990,000	-	224,060
Lease liabilities	193,053	197,845	81,652	24,040	92,153
	1,623,936	1,883,189	1,542,936	24,040	316,213

(1) The LDA Capital derivative liability (see Note 19(d)) has been excluded from the above table. The unlisted options are equity settled and cash inflows are received when the options are exercised.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return. The Group is not exposed to material market risk at period end.

Foreign currency risk

The Group is exposed to fluctuations in foreign currencies arising from the purchase of goods and services in currencies other than the transacting entity's functional currency. The legal parent, BrainChip Holdings, holds cash balances in AUD. As a result of this, the Group's statement of financial position can be affected by movements in the USD/AUD exchange rate when translating to the USD functional currency.

In respect of other monetary assets and liabilities denominated in foreign currencies (AUD), the Group's policy is to ensure that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

The Group is exposed to foreign currency risk on the derivative liability recognised in the balance sheet.

Equity price risk

The Group is exposed to equity price risk associated with unlisted options. Refer to Note 22(e) for sensitivity analysis.

Interest rate risk

The Group is exposed to interest rate risk (primarily on its cash and cash equivalents), which is the risk that a financial instrument's value will fluctuate as a result of changes in the market interest rates on interest-bearing financial instruments. The Group does not use derivatives to mitigate these exposures.

The Group adopts a policy of ensuring that as far as possible it maintains excess cash and cash equivalents in interest bearing accounts.

The Group's exposure to interest rate risk at the balance sheet date was negligible.

4. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (Continued)

Fair values

Fair values versus carrying amounts

Set out below is a comparison of the carrying amount and fair values of the Group's financial instruments, other than those with carrying amounts that are reasonable approximations of fair values.

(i) Cash and short-term deposits, trade and other receivables, trade and other payables and current financial liabilities are short term in nature. As a result, the fair value of these instruments is considered to approximate its fair value.

(ii) The fair value of the convertible securities are carried at amortised cost is considered to approximate the fair value given the 12-month term.

(iii) The LDA derivative asset and derivative liability are carried at fair value (see Notes 19(d) and 22(e)).

Capital Management

Capital managed by the Board includes contributed equity totalling $98,741,885 and other equity reserves of $247,872 at 31 December 2020 (2019: $64,740,268 and $247,872 respectively). When managing capital, management's objective is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. Management also aims to maintain a capital structure that ensures the lowest cost of capital available to the entity. Managed capital is disclosed on the face of the Statement of financial position and comprises contributed equity and reserves.

Management may adjust the capital structure to fund the continued development of the Company's pioneering AI technology and keep the Company operational. As the market is constantly changing, management may issue new shares or sell assets to raise cash, change the amount of dividends to be paid to shareholders (if at all) or return capital to shareholders.

During the financial year ending 31 December 2020, management did not pay a dividend and does not expect to pay a dividend in the foreseeable future (31 December 2019: Nil).

The Group encourages employees to be shareholders through the Long Term Incentive Plan.

There were no changes in the Group's approach to capital management during the year. Risk management policies and procedures are established with regular monitoring and reporting.

Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

5. REVENUE FROM CONTRACTS WITH CUSTOMERS

	2020 US$	2019 US$
(a) Types of good and services		
Product revenue	30,005	10,153
License revenue	-	2,232
Development service revenue	90,824	63,189
Total revenue from contracts with customers	120,829	75,574

	2020 US$	2019 US$
(b) Timing of revenue recognition		
Services transferred over time	90,824	63,189
Sale of product and license transferred at a point in time	30,005	12,385
Total revenue	120,829	75,574

6. EXPENSES

	2020 US$	2019 US$
(a) Research & development expenses		
Employee expenses	3,651,420	3,530,335
Government grants received [1]	(720,617)	(547,034)
Debt forgiveness of financial liability – refer Note 19(a)	(151,388)	-
Third party development services	1,525,000	700,000
Other contractor fees	403,651	366,590
Amortisation of intangible assets	65,471	78,509
Other expenses	378,702	383,010
Total research & development expenses	5,152,239	4,511,410
(b) Selling & marketing expenses		
Employee expenses	762,265	541,981
Contractor fees	315,824	234,356
Promotional advertising	224,442	-
Other expenses	123,970	285,258
Total selling & marketing expenses	1,426,501	1,061,595
(c) General and administration expenses		
Employee expenses	1,696,515	1,631,083
Legal and professional fees	482,250	894,000
Corporate and listing fees	457,252	111,777
Travel and accommodation expenses	40,733	285,323
Depreciation of plant & equipment	79,878	86,311
Depreciation of right of use assets	102,564	226,992
Office rent	67,817	93,165
Software lease and hardware expense	150,791	191,763
Other	149,847	274,786
Total general & administrative expenses	3,227,647	3,795,200

(1) The Group recognised research credits from the French and Australian regulatory authorities in accordance with local tax regulations. There are no unfulfilled conditions attached to amounts recognised.

7. FINANCE INCOME AND FINANCE EXPENSE

	2020 US$	2019 US$
(a) Finance income		
Interest received	27,453	66,571
Total finance income	27,453	66,571
(b) Finance expense		
Amortisation of day one loss on LDA Capital put option premium - refer Note 19(d)	5,085,464	-
Convertible Securities interest expense – refer Note 19(c)	268,522	519,454
Other interest expense	14,764	11,413
Foreign exchange loss	173,159	82,078
Total finance expense	5,541,909	612,945
(c) Fair value gain/(loss) through profit and loss		
Gain from financial assets and liabilities measured at fair value through the profit or loss – Borrowings - refer to Note 19(b)	(14,292)	-
Net loss from financial liabilities measured at fair value through the profit and loss – Convertible securities (refer Notes 12(a) and 19(b))	137,525	171,485
Net loss from liabilities measured at fair value through the profit and loss – LDA unlisted options (refer Note 19(d))	10,014,541	-
	10,137,774	171,485

8. DIVIDENDS PAID AND PROPOSED

No dividends have been paid or declared by the Company during the current or prior financial years or up to the date of this report.

9. INCOME TAX

	2020 US$	2019 US$
(a) Major components of income tax expense		
Consolidated income statement		
Current income tax:		
Current income tax expense/(benefit)	-	-
Tax losses previously not recognised	-	-
Deferred tax asset not recognised	-	-
Income tax (benefit)/expense reported in the statement of comprehensive income	-	-
(b) Amounts charged or credited directly to equity		
Current income tax related to items charged or credited directly to equity	-	-
Deferred income tax related to items charged or credited directly to equity	-	-
Income tax (benefit)/expense reported in equity	-	-
(c) A reconciliation between tax expense and the product of accounting loss before income tax multiplied by the Group's applicable income tax rate is as follows:		
Accounting loss before tax	26,822,049	11,310,062
At statutory income tax rate of 26% (2019: 27.5%)	(6,973,733)	(3,110,267)
Non-deductible expenses	6,603,121	-
Effect of lower/(higher) taxation rates of foreign subsidiaries	(654,498)	576,357
Other	(648,208)	(148,252)
Unrecognised tax losses and deferred income tax assets	1,673,318	2,682,162
Income tax expense/(benefit) reported in statement of profit or loss and other comprehensive income	-	-
Effective income tax rate	0%	0%

(d) Deferred tax relates to the following:

	Consolidated Statement of financial position 2020	2019
Accrued expenses	102,404	96,525
Tax losses	12,251,465	9,730,206
Share-based compensation	3,375,034	4,234,651
Intangible assets	23,744	32,222
Deferred State Tax deduction	-	-
Other	38,935	24,660
Not recognised	(15,791,582)	(14,118,264)
Net deferred tax liability	-	-
Deferred tax income/(expense)	-	-

(e) Unrecognised losses

At 31 December 2020, there are unrecognised deferred taxes on losses of $12,251,465 (tax effected) (2019: $9,730,206 (tax effected)), and other temporary differences of $3,540,117 (2019: $4,388,058) for the Group.

10. LOSS PER SHARE

	2020 US$	2019 US$
Net loss attributable to ordinary shareholders for basic and diluted earnings per share	(26,822,049)	(11,310,062)
	US cents per share	**US cents per share**
Basic and diluted loss per share	(1.76)	(0.95)
	Number	**Number**
Weighted average number of ordinary shares for basic loss per share [3]	1,527,522,665	1,187,151,633
Effect of the dilution of share options and performance rights [1] [2]	-	-
Weighted average number of ordinary shares adjusted for the effect of dilution	1,527,522,665	1,187,151,633

[1] At 31 December 2020, the Company had on issue 167,290,556 (2019: 195,068,976) share options that are excluded from the calculation of diluted loss per share for the current period as they are considered anti-dilutive.

[2] At 31 December 2020, the Company had on issue 4,462,500 restricted stock units (2019: 5,800,000) and 25,000 performance rights (2019: Nil) that are excluded from the calculation of diluted loss per share for the current period as they are considered anti-dilutive.

[3] Weighted average number of ordinary shares has been adjusted as a result of rights issue to institutional and sophisticated investors for all periods:
- to 31 December 2017 by a factor of approximately 1.02, effective November 2017;
- to 31 December 2019 by a factor of approximately 1.01, effective July 2019;
- to 31 December 2020 by a factor of approximately 1.02, effective August 2020.

11. CASH AND CASH EQUIVALENTS

	2020 US$	2019 US$
Cash at bank and in hand	19,096,796	7,593,022
Term deposits	39,629	29,156
Total	19,136,425	7,622,178
Reconciliation of the net loss after tax to net cash flows from operations		
Loss after tax	(26,822,049)	(11,310,062)
Non-cash adjustment to reconcile loss before tax to net cash flows:		
Depreciation	182,439	313,303
Amortisation	65,474	78,509
Debt forgiven on financial liabilities	(151,388)	-
Share-based payments	1,435,645	1,636,113
Amortisation of day one loss on LDA Capital put option premium	5,085,464	-
Loss/(gain) from financial liabilities measured at fair value through the profit or loss	10,137,774	(165,056)
Interest expense	268,522	521,063
Foreign exchange (gain)/loss - unrealised	(139,249)	87,311
Working capital adjustments:		
(Increase)/decrease in trade and other receivables	(435,040)	47,571
(Increase)/decrease in inventory	(38,378)	4,843
Increase/(decrease) in prepayments	7,744	(57,278)
(Decrease)/Increase in other assets	(5,510)	4,913
Decrease in financial liabilities	-	(4,207)
Increase in deferred revenue	13,441	
Increase in interest payable	10,551	-
Increase/(decrease) in defined benefits plan	23,463	34,464
Increase in employee provisions	139,355	51,840
Increase/(decrease) in trade and other payables	192,766	(244,762)
Net cash flows used in operating activities	(10,028,976)	(9,001,435)

12. TRADE AND OTHER RECEIVABLES

	2020 US$	2019 US$
Current		
Trade receivables [(1)]	97,716	4,228
Research tax credit	721,655	402,974
Receivable from sale of collateral shares (a)	-	766,818
Other receivables	88,309	13,492
	907,680	1,187,512

(1) Trade receivables are non-interest bearing and generally on terms of 30-90 days. As at year end, there is no allowance for expected credit loss recorded.

12. TRADE AND OTHER RECEIVABLES (continued)

(a) Receivable from the sale of collateral shares

Collateral Shares issuable to CST under the terms of the CSA were treated as treasury shares until traded. During the reporting period, 418,490 treasury shares were released to CST, valued at $22,395 (refer Note 22(b). In January 2020, CST and BrainChip agreed to reduce the number of collateral shares held by CST through the sale of 10 million collateral shares at an agreed price, resulting in a net gain to BrainChip of $87,832. CST also converted Convertible Securities valued at $136,798 via a reduction in collateral shares. CST traded all remaining collateral shares by the end of the period. The shares were valued in accordance with the CSA, being the lower of $0.079 per share and 92% of the average 5 day VWAP during the 20 trading days prior to maturity.

Movement in Receivable from the sale of collateral shares	**US$**
Opening balance	766,818
Gain on settlement of financial asset at fair value through profit and loss	87,832
Fair value recognised through profit or loss	170,724
Reduction in collateral shareholding through conversion of convertible note – refer Note 19(c)	(136,798)
Additional collateral shares traded	22,395
Cash received on reduction in collateral shareholding	(910,971)
Closing balance	-

13. RIGHT-OF-USE ASSETS

	2020 US$	**2019 US$**
Cost	153,479	360,732
Accumulated depreciation	(55,423)	(169,272)
Net carrying amount	98,056	191,460
Movement in Right-of-Use Assets:		
At 1 January	191,460	-
Initial adoption of AASB 16	-	114,407
Additions	-	305,736
Written down value of ROU asset disposed	(55,191)	-
Depreciation	(47,373)	(226,992)
Foreign exchange movements	9,160	(1,691)
At 31 December	98,056	191,460

14. PLANT & EQUIPMENT

Plant and equipment – Gross carrying value at cost	561,659	498,290
Accumulated depreciation	(412,343)	(319,407)
Net carrying amount	149,316	178,883
Movement in plant and equipment		
At 1 January	178,883	226,456
Additions	47,587	39,673
Depreciation charge for the year	(79,875)	(86,311)
Net foreign exchange movements	2,721	(935)
At 31 December	149,316	178,883

15. INTANGIBLE ASSETS AND GOODWILL

		2020 US$	2019 US$
	Patents and licenses (a)	805,184	870,655
	Goodwill	905,458	905,458
		1,710,642	1,776,113
(a)	Patents and licenses with finite useful life – at cost	1,116,851	1,081,320
	Accumulated amortisation	(311,667)	(210,665)
		805,184	870,655
	Movement in patents and licenses		
	At 1 January	870,655	829,664
	Additions	-	119,826
	Amortisation	(65,471)	(78,509)
	Net foreign exchange movements	-	(326)
	At 31 December	805,184	870,655

As at 31 December 2020, the Group performed an impairment assessment based on the fair value less cost of disposal (Level 2 in the fair value hierarchy) to confirm the recoverability of the Group's net assets. Based on the Group's assessment as at 31 December 2020, the market capitalisation of the Group was above the book value of its equity, demonstrating that the estimated recoverable amount was sufficient to recover the consolidated net assets at 31 December 2020. Assumptions used within the Group's fair value less cost of disposal determination included the Group's share price of A$0.43 at 31 December 2020 and the foreign exchange rate of $0.7703 AUD/USD at 31 December 2020.

As at 31 December 2020, the Group considered indicators of impairment of these assets and determined that there was none.

16. TRADE AND OTHER PAYABLES

	2020 US$	2019 US$
Current		
Trade creditors and accruals	693,320	469,408
LDA Capital commitment fee payable - refer Note 19(d)	223,400	-
Interest payable on borrowings	10,551	-
VAT and other taxes payable to foreign authorities	-	1,876
	927,271	471,284

17. EMPLOYEE BENEFITS LIABILITIES

Provision for annual leave	420,156	280,801
	420,156	280,801

The nature of the provision is described in Note 2(p).

18. LEASE LIABILITIES

Current	51,136	102,362
Non-current	48,088	90,691
	99,224	193,053
Movement in lease liabilities		
Opening balance	193,053	-
Initial adoption of AASB 16	-	114,407
Additions	-	305,736
Reduction in lease liabilities	(106,984)	(223,779)
Foreign exchange movements	13,155	(3,311)
	99,224	193,053

19. FINANCIAL ASSETS AND LIABILITIES

	2020 US$	2019 US$
Financial assets - Current		
Derivative asset - put option premium (d)	1,470,275	-
Total Financial assets	1,470,275	-
Financial liabilities - Current		
Borrowings (b)	320,678	-
Convertible liabilities - CST(c)	-	586,673
Derivative liabilities - CST(c)	-	150,259
Derivative liabilities – LDA unlisted options (d)	3,179,756	-
	3,500,434	736,932
Financial liabilities - Non-Current		
Advances from third parties (a)	88,786	222,667
Borrowings (b)	77,330	-
	166,116	222,667
Total Financial liabilities	3,666,550	959,599

(a) Advance from third parties

Non-current advances include loans from various French government agencies which are granted without any interest and are to be repaid under certain conditions. The benefit of the government loan at a below-market rate of interest is treated as a government grant.

During the year, BrainChip SAS received notification of the forgiveness of the loan totalling $151,388.

Movement in advances from third parties	2020 US$	2019 US$
As at 1 January	222,667	226,873
Forgiveness of financial liability	(151,388)	-
Repayment of loans to third parties	-	(2,193)
Foreign exchange	17,507	(2,013)
As at 31 December	88,786	222,667

(b) Borrowings

In response to the COVID-19 pandemic, on 20 April 2020, BrainChip Inc signed documents with First Republic Bank and received funding of $412,300 from the US Small Business Administration, “SBA”, Payroll Protection Program which is part of a program created by the Coronavirus Aid, Relief, and Economic Security Act, “CARES Act”, which provides financial relief from the COVID-19 emergency.

This loan bears interest at a fixed rate equal to 1.0% per annum and is payable every month beginning November 2020. This loan, guaranteed by the SBA, will mature in 2 years. SBA may forgive this loan if certain conditions are met. These conditions include all employees are to be kept on the payroll for eight weeks from receipt of the loan and the money to be used for payroll, rent, mortgage interest, or utilities. As of 31 December 2020, BrainChip Inc has met the prerequisites however is yet to receive confirmation that the loan is forgiven.

Movement in borrowings	2020 US$	2019 US$
As at 1 January	-	-
Financial liability with First Republic Bank	412,300	-
Grant revenue recognised in profit and loss	(14,292)	-
As at 31 December	398,008	-
Borrowings – current	320,678	-
Borrowings – non-current	77,330	-
	398,008	-

19. FINANCIAL ASSETS AND LIABILITIES (continued)

(c) Convertible Securities Agreement

On 26 June 2019, the Company entered into an unsecured Convertible Securities Agreement ("CSA") with CST Capital Pty Ltd ("CST") as trustee of the CST Investments Fund, under which the Company has issued Convertible Securities with a face value of US$2,850,000 ("Convertible Securities") to CST and an interest rate of 10%pa. The effect of the key terms described below gave rise to Convertible Securities held at amortised cost and embedded derivatives (conversion and extension option) held at fair value through profit and loss.

Conversion of debt and treasury shares

During the year, the remaining 418,490 treasury shares held by CST were disposed on market. The Company issued 30,734,684 ordinary shares to CST as a result of the conversion of Convertible Securities. The shares were valued in accordance with the CSA at the lower of $0.079 or 92% of the average 5 day VWAP during the 20 actual trading days prior to conversion. The value of the debt converted totalled $1,264,737. CST also converted Convertible Securities valued at $136,798 via the sale of collateral shares (refer Note 12(a))

Movement in CST convertible and derivative liabilities	**2020 US$**	**2019 US$**
As at 1 January	736,932	-
Cash received on issue of Convertible Note	-	2,565,000
Recognition of Receivable from sale of collateral shares	-	766,818
Share based payment expense allocated to derivative liability	-	310,972
Conversion of notes through collateral shares	(136,798)	(1,023,821)
Value of shares issued on conversion of convertible notes	(1,264,737)	(1,549,251)
Value of options issued	-	(650,302)
Costs of issue of Convertible and derivative liabilities	-	(30,454)
Interest expense	268,522	519,454
Fair value recognised through profit or loss	396,081	(171,485)
As at 31 December	-	736,932

(d) LDA Capital Agreement

On 13 August 2020, the Company announced it has entered into a Put Option Agreement (POA) with LDA Capital to provide the Company with up to A$29 million in committed equity capital over the next 12 months which may be extended by the parties for a further 12 months. The Company will control the timing and maximum amount of the draw down under this facility subject only to the minimum draw down commitment of A$10 million with in the first 12 months.

The POA was amended effective 22 October 2020, noting that BrainChip had fulfilled its obligation under the original agreement, and that LDA Capital had chosen to increase the available funding to A$45 million along with an increase in BrainChip's minimum draw down commitment to A$20million, inclusive of any funds received under the first capital call notice issued prior to the amendment.

The effect of the key terms as described below gave rise to a derivative liability and derivative asset held at fair value through profit and loss.

Key terms and conditions

(i) In accordance with the POA, as part consideration, the Company issued 75,000,000 unlisted options to LDA Capital comprising 37,500,000 unlisted options exercisable at A$0.15 and 37,500,000 unlisted options exercisable at A$0.20, expiring on 13 August 2023. These options were valued at $5,806,040 using a Black Scholes model and classified as derivative liabilities. Refer Note 22(e) for the valuation inputs.

(ii) On 19 August 2020, the Company issued a call notice to LDA Capital (a Put Option) and subsequently, on 24 August 2020, issued LDA Capital with 35,000,000 shares for no consideration ("Collateral Shares") which LDA Capital was entitled to sell on-market (subject to certain terms). Any unused Collateral Shares were to be adjusted or used for subsequent calls, brought back by the Company or transferred to a trustee or nominee of the Company. LDA Capital holds 8,750,000 Collateral shares at 31 December 2020 which are included in Treasury shares (Note 22(c)).

(iii) The issue price of the shares under the purchased put option is calculated as 90% of the higher of the average VWAP of shares in the 30- trading day period after the issue of a call notice, and the minimum price notified to LDA Capital by the Company upon exercise of the put option. The VWAP calculation and the number of subscription shares are subject to adjustment as a result of certain events occurring including trading volumes falling below an agreed threshold level or a material adverse event occurring in relation to the Company.

19. FINANCIAL ASSETS AND LIABILITIES (continued)

Key terms and conditions (continued)

(iv) The Company is liable for a commitment fee of A$580,000, comprising A$290,000 due and payable at the closing of the Company's first capital call and the remaining A$290,000 due and payable at closing of the second capital call. The commitment fee may be paid in shares at the Company's discretion. The outstanding commitment fee translated to $223,400 at year end and is recognised in Trade and other payables.

(v) The Company is also liable for a failure fee payable if the Company does not meet the agreed minimum draw down commitment within 12 months of the date of the POA. The failure fee has been accounted for as a deferred option premium on the committed portion of the put option.

Recognition and reduction in put option premium and derivative liability

On entering the POA, the Company recognised the purchased put option as a derivative asset with a fair value of $1,153,781. The consideration payable comprised 75,000,000 unlisted options, recognised as a derivative liability totalling $5,800,734, and a commitment fee payable of $415,361. The difference between the total consideration payable and the derivative asset recognised was deferred on the balance sheet in accordance with the requirements of accounting standards. The valuation of the derivative asset was determined using a market based approach with reference to a 15% market placement discount. A derivative liability was recognised based on the fair value of the 75,000,000 options issued determined using a Black Scholes option pricing model.

On 24 August 2020, the Company issued a Capital Call Notice under the POA to LDA Capital for 35,000,000 shares which triggered the POA pricing mechanism. The settlement of this Capital Call Notice in October 2020 resulted in LDA Capital subscribing for 26,250,000 ordinary shares. The net subscription proceeds received amounted to $7,536,236 (A$10,538,125). The settlement of this Capital Call Notice also released the deferred day one loss to profit and loss.

The derivative liability relating to the unlisted options issued to LDA Capital as part consideration were revalued during the period for exercised options and at the year end for the unexercised options. The remeasurement of the derivative liability resulted in a fair value loss of $10,014,541. Unlisted options exercised by LDA Capital contributed to cash inflows of $7,570,156 to the Company.

Movement in LDA financial asset	**2020 US$**	**2019 US$**
As at 1 January	-	-
Derivative asset – put option premium recognised at inception	1,153,781	-
Fair value movement in financial asset - put option premium	(9,295)	
Release of derivative assets on settlement	(413,583)	-
Revaluation of the put option premium	635,049	-
Foreign exchange movements	104,323	-
As at 31 December	1,470,275	-

Movement in LDA derivative liabilities	**2020 US$**	**2019 US$**
As at 1 January	-	-
Derivative liability recognised at inception	5,800,734	-
Re-measurement to fair value through profit or loss	10,014,541	-
Fair value of options exercised at each exercise date Foreign	(12,641,387)	-
exchange movements	5,868	-
As at 31 December	3,179,756	-

20. DEFINED BENEFIT PLAN

	2020 US$	2019 US$
Net employee defined benefit liabilities	203,868	141,415

BrainChip SAS has a defined benefit pension plan which is governed by the employment laws of France. Pension plans that are defined benefit schemes (in which the Company guarantees an amount or defined level of benefits) are recognised on the balance sheet based on an actuarial valuation of the obligations at period-end.

This valuation uses the projected unit credit method, taking into account staff turnover and mortality probability.

The defined benefit plan is administered by the French regulatory authority and is legally separated from the Group. The authority is required by law to act in the best interests of the plan participants and is responsible for setting certain policies (e.g. investment, contribution and indexation policies) of the fund.

The defined benefit plan exposes the Group to actuarial risks, such as longevity risk, currency risk, interest rate risk, and market (investment) risk.

(a) Movement in net defined benefit liability

	2020 US$	2019 US$
At 1 January	141,415	106,951
Included in profit or loss		
Current services costs	23,463	18,309
Finance costs	932	1,608
Included in OCI		
Actuarial losses/(gains)	24,364	16,990
Foreign exchange movement	13,694	(2,443)
At 31 December	203,868	141,415

(b) Defined benefit obligation

The following were the principal actuarial assumptions at the reporting date:

	2020	2019
Discount rate	0.4%	0.8%
Future salary growth	1.5%	1.5%
Retirement at employee's initiative	45.0%	45.0%
Turnover rate (weighted average)	1.0%	1.0%

Assumptions regarding future mortality have been based on published statistics and morality tables provided by the French government.

(c) Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

	Increase US$	Decrease US$
Discount rate (+/-1% movement)	(30,169)	39,124
Future salary growth (+/-1.0 % movement)	38,365	(30,331)

Although the analysis does not take account of the full distribution of cashflows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

21. FINANCIAL ASSETS & LIABILITIES

(a) Set out below is an overview of financial assets (other than cash and short term deposits) and financial liabilities held by the Group as at 31 December 2020:

	2020 US$	2019 US$
Financial assets at amortised cost		
Trade and other receivables	907,680	420,694
Financial assets at fair value through profit or loss		
Receivable on sale of collateral shares	-	766,818
Derivative asset – put option premium	1,470,275	-
Total financial assets	2,377,955	1,187,512
Current	2,377,955	1,187,512
Non-current	-	-
Total financial assets	2,377,955	1,187,512
Financial liabilities at amortised cost		
Trade and other payables	927,271	471,284
Financial liabilities		
- Advances from third parties	88,786	222,667
- Convertible liabilities	-	586,673
- Borrowings	398,008	-
- Deferred gain	635,049	-
Financial liabilities at fair value through profit & loss		
Financial liabilities		
- Derivative liabilities (LDA unlisted options)	3,179,756	150,259
Total financial liabilities	5,228,870	1,430,883
Current	5,062,754	1,208,216
Non-current	166,116	222,667
Total financial liabilities	5,228,870	1,430,883

21. FINANCIAL ASSETS & LIABILITIES (Continued)

(b) The following table provides the fair value measurement hierarchy of the Group's financial assets and liabilities:

		Fair value measurement using		
	Total	**Quoted prices in active markets (Level 1)**	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
As at 31 December 2020	**US$**	**US$**	**US$**	**US$**
Financial assets measurement at fair value				
Derivative asset - put option premium [(1)]	1,470,275			1,470,275
	1,470,275	-	-	1,470,275
Financial liabilities measured at fair value				
Derivative liabilities – LDA Capital	3,179,756	-	3,179,756	-
	3,179,756	-	3,179,756	-
As at 31 December 2019				
Financial assets measurement at fair value				
Receivable on sale of collateral shares	766,818	766,818	-	-
	766,818	766,818	-	-
Financial liabilities measured at fair value				
Derivative liabilities - CST	150,259	-	150,259	-
	150,259	-	150,259	-

There were no transfers between Level 1, Level 2 and Level 3 during 2020 and 2019.

(1) The fair value of the derivative asset on recognition of the put option premium was determined using a market based approach with reference to a 15% market placement discount by an independent expert.

(c) Changes in liabilities arising from financing activities are disclosed within individual notes.

22. CONTRIBUTED EQUITY

	2020 US$	2019 US$
(a) Ordinary Shares		
Issued and fully paid	98,741,885	64,740,268

(b) Movements in ordinary shares on issue

	Number	US$
At 1 January 2019	1,049,883,519	55,143,789
Issue of shares as per Convertible Securities	1,561,279	-
Issue of shares as collateral in relation to the Convertible Securities	30,000,000	-
Issue of shares upon non-renounceable entitlement [1]	178,753,609	7,507,560
Shares issued on conversion of Convertible Securities	77,177,256	1,549,251
Treasury shares disposed by CST Capital Pty Ltd	-	1,023,820
Share issue costs incurred	-	(484,152)
At 31 December 2019	1,337,375,663	64,740,268
At 1 January 2020	1,337,375,663	64,740,268
Shares issued on conversion of Convertible Securities - refer Note 19(c)	30,734,684	1,264,737
Treasury shares disposed by CST Capital Pty Ltd - refer Note 12(a)	-	22,395
Issue of shares	103,958,000	1,989,897
Issue of shares to the Trustee of the BrainChip LTIP	20,000,000	-
Issue of collateral shares under LDA Capital put option premium - refer Note 19(d)	35,000,000	-
Shares allocated on exercise of LDA Capital put option premium - refer Note 19(d) [2]	26,250,000	7,327,638
Collateral shares offset against subscription shares	(26,250,000)	-
Shares allotted on exercise of LDA Capital options - refer Note 19(d)	61,854,444	20,211,543
Shares issued on conversion of CST options	21,868,796	1,845,133
Shares issued on conversion of RSUs	3,000,000	-
Shares issued on conversion of options	2,800,000	143,016
Treasury shares issued on conversion of options	-	1,441,348
Share issue costs incurred	-	(244,090)
At 31 December 2020	1,616,591,587	98,741,885

[1] The Company issued 112,206,282 shares on 8 July 2019 raising A$6,732,377 (US$4,696,641) and 66,547,327 shares on 16 July 2019 raising a further A$3,992,840 (US$2,810,919).

[2] *LDA Capital cash reconciliation:*	2020 US$	2019 US$
Cash received on settlement	7,536,236	-
Commitment fee released	207,341	-
Release of derivative assets on settlement	(413,583)	-
Other	(2,356)	-
Value of shares allocated on exercise of LDA Capital put option premium	7,327,638	-

22. CONTRIBUTED EQUITY (Continued)

(c) Treasury shares

	2020 Number	2019 Number
Fully paid shares issued to LDA Capital Pty Ltd	8,750,000	-
Fully paid shares issued to CST Capital Pty Ltd	-	418,490
Fully paid shares issued to Trustee of Long Term Incentive Plan ("LTIP")	9,495,000	450,000
	18,245,000	868,490
Movements in Treasury shares		
At 1 January	868,490	1,500,000
Shares issued to Trust from BrainChip Holdings Ltd [1]	20,000,000	-
Shares issued to CST Capital Pty Ltd – refer Note 19(c)	-	30,000,000
Shares disposed by CST Capital Pty Ltd	(418,490)	(29,581,510)
Shares issued by Trustee of the LTIP on conversion of Performance Rights	-	(1,000,000)
Shares Issued on exercise of share options	(10,155,000)	-
Shares Issued on conversion of RSU	(800,000)	(50,000)
Shares issued to LDA Capital as collateral shares – refer Note 19(d)(ii)	35,000,000	-
Shares disposed of by LDA Capital and offset against subscription shares – refer Note 19(d)(ii)	(26,250,000)	-
At 31 December	18,245,000	868,490

[1] The BrainChip Long Term Incentive Plan Trust was established on 2 August 2018. Equity Trustees Limited was appointed the Plan Trustee effective 2 March 2020, replacing Solium Nominees (Australia) Pty Limited. The Company issues shares to the Trust at no value to be held available for the conversion of vested options, performance rights and restricted stock units held by LTIP members.

(d) Terms and conditions of contributed equity

Holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholder meetings. In the event of winding up the Company the holders are entitled to participate in the proceeds from the sale of all surplus assets in proportion to the number of and amounts paid up on shares held.

(e) Options on issue

Unissued ordinary shares of the Company under option at 31 December 2020 are as follows:

Type	Expiry Date	Exercise Price (US$)	31 December 2020 Number	31 December 2019 Number
Options issued to shareholders				
Unlisted	31/05/2020	0.171	-	20,000,000
Options issued to LDA Capital				
Unlisted [1]	13/08/2023	0.143	13,145,556	-
Options issued as share-based payments				
Unlisted – refer Note 25(b)	Various	Various	154,145,000	175,068,976
Total			167,290,556	195,068,976

The above options are exercisable at any time on or before the expiry date.

(1) Options issues to LDA Capital in accordance with POA -2020

In accordance with the Agreement, the Company issued 75,000,000 unlisted options to LDA Capital, expiring on 13 August 2023 and comprising:

(a) 37,500,000 unlisted options exercisable at $0.108 (A$0.15) which were fully exercised by year end; and

(b) 37,500,000 unlisted options exercisable at $0.143 (A$0.20), of which 13,145,556 remained exercisable at 31 December 2020.

22. CONTRIBUTED EQUITY (Continued)

(1) Options issued to LDA Capital in accordance with POA – 2020 (continued)

Refer to Note 19 for further details of the arrangement. The fair value of the equity-settled share options granted in accordance with the POA is estimated as at the date of the agreement using a Black Scholes Option Pricing model applying the following inputs:

Valuation inputs at inception:

Number of options	Fair value at measurement date US$	Share price at Contract Date		Exercise price		Expected Volatility (%)	Risk-free interest rate (%)	Expected life of options in years
		A$	US$	A$	US$			
37,500,000	0.081	0.175	0.125	0.150	0.108	100	0.26	3
37,500,000	0.074	0.175	0.125	0.20	0.143	100	0.26	3

Valuation inputs for re-measurement at 31 December:

Number of options	Fair value at measurement date US$	Share price at 31 December 2020		Exercise price		Expected Volatility (%)	Risk-free interest rate (%)	Expected life of options in years
		A$	US$	A$	US$			
13,145,556	0.242	0.43	0.331	0.20	0.154	100	0.04	2.63

Sensitivity analysis

Reasonably possible changes in the share price, holding other assumptions constant, would have affected the fair value of the options at 31 December 2020 by the amounts shown below:

	Increase US$	Decrease US$
Share price (+/-$0.05 movement)	455,698	(455,698)

(f) Performance Rights on issue

Type	**31 December 2020 Number**	**31 December 2019 Number**
Unlisted – refer Note 25(e)	25,000	-
Total	25,000	-
Movement in Performance Rights		
1 January	-	-
Issue during the period	25,000	-
Converted during the period	-	-
31 December	25,000	-

22. CONTRIBUTED EQUITY (Continued)

(g) Restricted Stock Units (RSUs) on issue

Unissued ordinary shares of the Company under restricted stock units at 31 December 2020 are as follows:

Type	31 December 2020 Number	31 December 2019 Number
Unlisted – refer Note 25(g)	4,462,500	5,800,000
Total	4,462,500	5,800,000

Movement in RSUs		
1 January	5,800,000	3,850,000
Issue during the period	2,462,500	2,000,000
Converted during the period	(3,800,000)	(50,000)
31 December	4,462,500	5,800,000

23. RESERVES

CONSOLIDATED	Foreign currency translation reserve US$	Share- based payment reserve US$	Other equity reserve US$	Total US$
At 1 January 2019	80,526	16,463,527	247,872	16,791,925
Share-based payments	-	1,955,337	-	1,955,337
Translation of foreign operations	(7,723)	-	-	(7,723)
At 31 December 2019	72,803	18,418,864	247,872	18,739,539
At 1 January 2020	72,803	18,418,864	247,872	18,739,539
Share-based payments	-	1,435,645	-	1,435,645
Translation of foreign operations	42,137	-	-	42,137
At 31 December 2020	114,940	19,854,509	247,872	20,217,321

Nature and purpose of reserves

Share-based payment reserve

The share-based payment reserve is used to record the value of share-based payments provided to Directors, employees and third parties as part of their remuneration.

Other equity reserve

This reserve arises from the issue of shares in BrainChip Holdings Ltd to extinguish the liability owing to Convertible Securities holders in BrainChip Inc., on 10 September 2015.

Foreign currency translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

24. ACCUMULATED LOSSES

	2020 US$	2019 US$
At 1 January	(74,383,457)	(63,056,405)
Re-measurement losses on defined benefit plans	(24,364)	(16,990)
Net loss in current period attributable to members of the Company	(26,822,049)	(11,310,062)
At 31 December	(101,229,870)	(74,383,457)

25. SHARE-BASED PAYMENTS

	2020 US$	2019 US$
(a) Recognised share-based payment expenses		
Options issued to LTIP members and CST	1,251,815	1,384,201
Performance Rights issued to LTIP members and consultants	2,020	358,447
Restricted stock units issued to LTIP members	181,810	212,689
Recognised in share-based payment reserve	1,435,645	1,955,337
Equity Instruments capitalised to Convertible Securities	-	(342,965)
Equity instruments reported as prepayments	-	23,741
Total share-based payment expense	1,415,645	1,636,113

The 2018 Long Term Incentive Plan (LTIP) was adopted by shareholders in May 2018. The Company has Options that were issued under the 2015 LTIP current at the time of offer however all new equity awards post May 2018 have been issued under the 2018 LTIP. The 2015 Performance Rights Plan and the 2015 Directors & Officers Option Plan have been terminated as all equity instruments issued under these plans have been exercised or expired.

2018 and 2015 Long Term Incentive Plan
The objective of the LTIP is to attract and retain key employees and consultants. It is considered that the LTIP, through the issue of equity instruments, will provide selected employees and consultants with opportunity to participate in the future growth of the Company. Equity instruments offered under the LTIP must be offered at no more than a nominal value and under terms to be determined by the Board from time to time. It is not the intention of the Company to apply for quotation of any of the equity instruments which are issued under the LTIP.

(b) Share Options granted as share-based payments

The following table illustrates the number and weighted average exercise prices (WAEP) of, and movements in, share options issued as share based payments during the year:

	2020 Number	2020 WAEP (US$)	2019 Number	2019 WAEP (US$)
Outstanding at 1 January	175,068,796	0.115	136,700,000	0.165
Granted during the period	29,525,000	0.167	85,018,796	0.056
Exercised during the period	(34,823,796)	(0.096)	-	-
Forfeited during the period	(15,625,000)	(0.048)	(28,275,000)	(0.138)
Lapsed during the period	-	-	(11,375,000)	(0.201)
Expired during the period	-	-	(7,000,000)	(0.137)
Outstanding at the end of the period	154,145,000	0.138	175,068,796	0.115
Exercisable (vested and unrestricted) at the end of the period	90,665,833	0.143	91,656,296	0.117

The weighted average remaining contractual life for the share options outstanding at 31 December 2020 is 5.374 years (2019: 3.23 years).
The weighted average fair value of options granted during the year was $0.104 (2019: $0.081)
The range of exercise prices for options outstanding at the end of the year was $0.031 to $0.262(2019: $0.037 to $0.242).

The above options are exercisable after vesting and at any time on or before the expiry date.

25. SHARE-BASED PAYMENTS (Continued)

(c) Options granted under the Long Term Incentive Plan

Unissued ordinary shares of the Company under option at 31 December 2020 are as follows:

Grant Type	Grant Date	Expiry Date	Exercise Price (US$)	Number at year end	Exercised during year	Forfeited during year	Vested at year end
LTIP [1]	4/12/2015	21/12/2020	0.172	-	4,800,000	-	-
LTIP [1]	22/01/2016	01/02/2021	0.165	1,125,000	375,000	-	1,125,000
LTIP [2]	28/09/2016	30/09/2021	0.172	50,000,000	-	-	41,750,000
LTIP [1]	8/07/2016	10/10/2021	0.113	3,400,000	600,000	-	3,400,000
LTIP [1]	7/10/2016	10/10/2021	0.205	2,000,000	-	-	2,000,000
LTIP [1]	27/01/2017	16/02/2022	0.242	100,000	-	-	75,000
LTIP [3]	30/01/2017	16/02/2022	0.185	3,000,000	-	-	3,000,000
LTIP [3]	30/01/2017	31/12/2022	0.185	3,000,000	-	-	3,000,000
AGM 2017 [4]	31/05/2017	31/01/2023	0.138	2,000,000	-	-	2,000,000
AGM 2017 [4]	31/05/2017	31/01/2024	0.138	2,000,000	-	-	2,000,000
AGM 2017 [5]	31/05/2017	01/02/2023	0.182	1,250,000	500,000	-	1,250,000
AGM 2017 [5]	31/05/2017	01/02/2024	0.182	1,750,000	-	-	1,750,000
AGM 2017 [5]	31/05/2017	01/02/2025	0.182	1,750,000	-	-	1,750,000
AGM 2017 [5]	31/05/2017	01/02/2026	0.182	1,750,000	-	-	-
LTIP [6]	7/07/2017	7/07/2023	0.125	2,000,000	-	-	2,000,000
LTIP [6]	7/07/2017	7/07/2024	0.125	2,000,000	-	-	2,000,000
LTIP [6]	7/07/2017	7/07/2025	0.125	2,000,000	-	-	2,000,000
LTIP [6]	7/07/2017	7/07/2026	0.125	2,000,000	-	-	-
LTIP [1]	28/11/2017	14/12/2022	0.136	345,000	155,000	-	200,000
LTIP [1]	28/11/2017	14/12/2022	0.141	300,000	-	-	225,000
LTIP [1]	28/11/2017	14/12/2022	0.148	400,000	-	-	300,000
LTIP [1]	1/12/2017	14/12/2022	0.140	100,000	-	100,000	100,000
LTIP [7]	5/03/2018	13/03/2028	0.147	4,450,000	-	-	1,575,000
LTIP [8]	5/03/2018	13/03/2028	0.147	-	2,000,000	-	-
LTIP [1]	5/03/2018	13/03/2028	0.171	200,000	-	600,000	400,000
LTIP [1]	30/04/2018	08/06/2028	0.136	500,000	-	-	250,000
LTIP [1]	30/04/2018	08/06/2028	0.117	1,000,000	-	-	500,000
LTIP [1]	16/06/2018	16/06/2028	0.105	450,000	150,000	-	150,000
LTIP [1]	19/11/2018	5/10/2028	0.103	200,000	200,000	-	-
LTIP [9]	11/03/2019	13/03/2029	0.047	20,000,000	-	-	6,875,000
LTIP [10]	18/03/2019	18/03/2029	0.042	3,200,000	4,175,000	14,625,000	3,200,000
AGM 2019 [11]	30/05/2019	30/05/2029	0.069	7,500,000	-	-	7,500,000
LTIP [1]	13/06/2019	30/05/2029	0.037	3,850,000	-	300,000	-
LTIP [1]	23/09/2019	23/09/2029	0.031	500,000	-	-	125,000
LTIP [12]	23/09/2019	23/09/2029	0.035	500,000	-	-	145,833
CST – Note 17(c)	13/06/2019	26/06/2022	0.081	-	21,868,796	-	-
LTIP [13]	10/8/2020	06/08/2030	0.125	8,300,000	-	-	-
LTIP [1]	26/8/2020	17/08/2030	0.144	14,000,000	-	-	-
LTIP [1]	7/10/2020	07/10/2030	0.250	600,000	-	-	-
LTIP [1]	3/12/2020	03/12/2030	0.256	3,225,000	-	-	-
LTIP [1]	07/12/2020	07/12/2030	0.262	2,900,000	-	-	-
LTIP [1]	21/12/2020	21/12/2030	0.244	500,000	-	-	-
				154,145,000	34,823,796	15,625,000	90,665,833

25. SHARE-BASED PAYMENTS (Continued)

(1) Options issued to employees and consultants which vest equally over a 4-year period on each anniversary of the grant date.
(2) 50,000,000 unlisted options were with an expiry date of 30 September 2021. 23,000,000 options vest equally over a 4-year period. 27,000,000 options vest equally over a 4-year period after attainment of specific performance criteria.
(3) 6,000,000 unlisted options issued to consultants on 16 February 2017. 50% of these options vested immediately and 50% vested on 31 December 2017. Options expire on 16 February 2022 and 31 December 2022 respectively.
(4) 4,000,000 unlisted vested options held after the resignation of the Director.
(5) 7,000,000 unlisted options were issued to Directors, of which 25% of the options vest on each anniversary date of the offer date (1 February 2017) and expire five years from each vesting date.
(6) 8,000,000 unlisted options were issued to Directors of which 25% of the options vest on each anniversary date of the offer date (7 July 2017) expire five years from each vesting date.
(7) 4,450,000 unlisted options issued to employees on 13 March 2018 and expiring on 13 March 2028 with the following vesting terms: 1,200,000 vest 5 July 2021; 800,000 vest 7 October 2021; 1,500,000 vest 9 December 2019; 800,000 vest 15 January 2021; 150,000 vesting equally over a 4-year period from 5 March 2018.
(8) 2,000,000 unlisted options issued to consultants on 13 March 2018, expiring on 13 March 2028, with the following vesting terms: 25% on 30 April 2018, 25% on 30 September 2018 and 50% on 13 February 2019.
(9) 7,500,000 options vest on the first anniversary of the grant date, with 1/36th monthly thereafter; 2,500,000 options will vest each anniversary of the grant date.
(10) 7,500,000 options vest on the first anniversary of the grant date, with 1/36th monthly thereafter; 3,000,000 options will vest each anniversary of the grant date.
(11) 7,500,000 options vest immediately.
(12) 25% vests on the first anniversary of the grant date, with 1/36th monthly thereafter.
(13) Options vest on the 4th anniversary of the grant date.

(d) Options pricing model

(1) Options issued under LTIP - 2020

The fair value of the equity-settled share options granted under the LTIP is estimated as at the date of the offer of the grant using a Black Scholes Option Pricing model. The following table lists the inputs to the models used for the valuation of options during the year ended 31 December 2020:

	Number of options	Fair value at measurement date $US	Share price at Grant Date US$	Exercise price US$	Expected volatility (%)	Risk-free interest rate (%)	Expected life of options in years
Employees	8,300,000	0.079	0.089	0.089	100.0	0.89	10.0
	14,000,000	0.122	0.215	0.145 (1)	100.0	0.90	10.0
	600,000	0.301	0.338	0.338	100.0	0.90	10.0
	3,225,000	0.242	0.271	0.271	100.0	0.96	10.0
	2,900,000	0.235	0.264	0.264	100.0	0.91	10.0
	500,000	0.235	0.264	0.264	100.0	0.91	10.0

(1) Options were originally granted on 10 August 2020 with a fair value of $0.112 per option. These options were modified on 11 September 2020 resulting in an incremental FV of $0.01 per option which has been added to options fair value.

(2) Options issued under LTIP - 2019

The fair value of the equity-settled share options granted under the LTIP is estimated as at the date of grant using a Black Scholes Option Pricing model. The following table lists the inputs to the models used for the valuation of options during the year ended 31 December 2019:

	Number of options	Fair value at measurement date US$	Share price at Grant Date US$	Exercise price US$	Expected volatility (%)	Risk-free interest rate (%)	Expected life of options in years
Director	8,000,000	0.031	0.037	0.052	88.4	1.50	10.3
Employees	22,000,000	0.038	0.045	0.047	88.4	1.44	10.0
	20,000,000	0.039	0.045	0.042	88.4	1.44	10.0
	7,500,000	0.030	0.037	0.069	88.4	1.50	10.1
	4,650,000	0.042	0.048	0.037	94.5	1.17	10.0
	500,000	0.023	0.026	0.031	94.4	0.96	10.0
	500,000	0.028	0.032	0.035	95.3	1.00	10.0

25. SHARE-BASED PAYMENTS (Continued)

(3) Options issued in accordance with Convertible Securities Agreement - 2019

The fair value of the equity-settled share options granted in accordance with the Convertible Securities Agreement is estimated as at the date of grant using a Black Scholes Option Pricing model applying the following inputs:

Number of options	Fair value at measurement date US$	Share price at Grant Date US$	Exercise price US$	Expected Volatility (%)	Risk-free interest rate (%)	Expected life of options in years
21,868,796	0.03	0.053	0.082	92.0	0.98	3

The expected dividend yield for all options granted during the period was nil. The expected life of the share options is based on historical data and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome.

(e) Performance Rights issued under LTIP

The following table summarises the movement in Performance Rights issued to under LTIP:

	Opening balance 1 January 2020	**Issued during the year**	**Converted during the year**	**Closing balance 31 December 2020**
LTIP Performance Rights	-	25,000	-	25,000
	-	25,000	-	25,000

(f) Performance rights valuation model

The fair value of the performance rights granted under the LTIP is estimated as at the date of grant using the share price and the exchange rate at the date of the offer of the grant. The following table lists the fair value of performance rights issued during the year:

	Number of performance rights	Grant date	Fair value at grant date US$
2020: Consultants	25,000	18/11/2020	0.264

(g) Restricted Stock Units issued as share-based payments

The Company granted the following Restricted Stock Units to employees, the fair value of which is estimated using the share price on the date of the offer of the grant. The RSUs are subject to various vesting periods effective from date of grant.

		Number of RSUs granted	Grant date	Fair value at the date of offer of grant. US$
2020				
	Consultant	12,500	03/12/2020	0.264
	Employees	2,100,000	10/08/2020	0.089
		350,000	21/12/2020	0.264
		2,462,500		
2019				
	Employees	2,000,000	26/06/2019	0.048
		2,000,000		

26. CONTINGENT ASSETS AND LIABILITIES

The Group had no contingent assets or liabilities at 31 December 2020 (31 December 2019: $Nil).

27. EVENTS AFTER THE BALANCE SHEET DATE

Subsequent to the end of the year, LDA converted the remaining 13,145,556 options exercisable at A$0.20 by the end of January 2021, resulting in a cash injection of $2,031,235 (A$2,629,111). A further 4,850,000 options were exercised under the LTIP.

No other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in subsequent financial years.

28. AUDITOR'S REMUNERATION

	2020 US$	2019 US$
Amounts received or due to be receivable by Ernst & Young (Australia) for:		
An audit or review of the financial reports of the entity	107,593	96,460
	107,593	96,460
Amounts received or due and receivable by non-Ernst & Young audit firms for:		
An audit or review of the financial report of the entity	9,851	9,785
	9,851	9,785

29. OPERATING SEGMENTS

For management purposes, the Group is organised into one operating segment, being the technological development of designs that can be licensed to OEM (Original Equipment Manufacturer) Customers, End Users and System Integrators based on Artificial Neural Networks.

All the activities of the Group are interrelated, and each activity is dependent on the others. Accordingly, all significant operating disclosures are based upon analysis of the Group as one segment. The financial results from this segment are equivalent to the financial statements of the Group as a whole.

The Group currently derives revenue from BrainChip Inc., located in the USA, and BrainChip SAS, its France based subsidiary.

Geographically, the Group has the following revenue information based on the location of its customers and non-current assets from where its investing activities are managed.

	2020 US$	2019 US$
Revenue from external customers		
North America	100,000	12,231
Europe, Middle East & Asia (EMEA)	20,829	63,343
Revenue from continuing operations	120,829	75,574

Customers representing more than 10% of revenues in the current year amounted to $80,000 (2019: $13,397) comprising USA based Customer A: $50,000 of development service revenue; and USA based Customer B: $20,000 of development service revenue and $10,000 product revenue.
In the prior year $10,000 of product sales and from an Asian customer and $60,958 of development service revenue from European customers, comprising Customer A: $22,228 and Customer B $38,730.

Non-current assets	2020 US$	2019 US$
North America	945,494	1,104,788
EMEA	1,052,832	1,076,469
	1,998,326	2,181,257

30. RELATED PARTY DISCLOSURES

(a) Ultimate parent

The ultimate legal parent entity of the Group is BrainChip Holdings Ltd.

(b) Subsidiaries

The consolidated financial statements include the financial statements of BrainChip Holdings and the subsidiaries listed in the following table:

Name	Country of incorporation	Beneficial interest 2020	Beneficial interest 2019
Subsidiary companies of BrainChip Holdings Ltd			
BrainChip Inc. (1)	USA	100%	100%
BrainChip Research Institute Pty Ltd	Australia	100%	-
Subsidiary companies of BrainChip Inc.			
BrainChip SAS	France	100%	100%
BrainChip Systems India Private Limited (2)	India	100%	-

(1) BrainChip Holdings Ltd holds 100% of the shares of BrainChip Inc. effective from 10 September 2015.
(2) BrainChip Holdings Ltd holds 1%, and BrainChip Inc. holds 99%, of the shares of BrainChip Systems India Private Limited, effective from 22 July 2020.

(c) Other entities

The consolidated financial statements include the following entities controlled by BrainChip Holdings Ltd:

Name	Country of registration	Beneficial interest 2020	Beneficial interest 2019
BrainChip Long Term Incentive Plan Trust (1)	Australia	**-**	**-**

(1) BrainChip Holdings Ltd executed the BrainChip Long Term Incentive Plan Trust on 2 August 2018 and appointed Equity Trustees Limited as the Plan Trustee, replacing Solium Nominees (Australia) Pty Ltd, effective from 2 March 2020.

(d) Key Management Personnel compensation

Total remuneration paid to KMP of the Group during the year are as follows:

	2020 US$	2019 US$
Short-term employee benefits	1,979,665	1,994,008
Termination expense	80,830	-
Share-based payment	916,949	713,016
	2,977,444	2,707,024

Related party transactions with KMPs of the Group are as follows:

There were no related party transactions with KMPs of the Group.

(e) Transactions with other related parties

There were no transactions with other related parties.

(f) Loans to/from related parties

There were no outstanding loans arising to or from related parties (31 December 2019: $Nil).

31. PARENT ENTITY INFORMATION

	2020 US$	2019 US$
Information relating to BrainChip Holdings Ltd		
Current assets	3,308,421	6,373,463
Non-current assets	18,164,857	3,538,746
Total assets	21,473,278	9,912,209
Current liabilities	(4,379,393)	(815,859)
Non-current liabilities	-	-
Total liabilities	(4,379,393)	(815,859)
Net assets	17,093,885	9,096,350
Issued capital	123,804,655	89,961,546
Other contributed equity	2,025,617	2,025,617
Accumulated losses	(148,350,917)	(121,309,888)
Share-based payment reserve	39,384,827	38,189,372
Option premium reserve	480,731	480,731
Foreign currency translation reserve	-	-
Other reserves	(251,028)	(251,028)
Total shareholders' equity	17,093,885	9,096,350
Net loss of the parent entity (1)	27,041,026	12,563,187
Total comprehensive loss of the parent entity	27,041,026	12,563,187

(1) At the reporting date investments and loans receivable from controlled entities net of provision for impairment totalled $19,046,878 (2019: $3,537,745). Impairment expense of $9,370,125 (2019: $8,684,413) was recognised for the year ended 31 December 2020.

Guarantees entered into by the parent entity in relation to the debts of its subsidiaries
Nil

Contingent liabilities of the parent entity
Nil

Contractual commitments by the parent entity for the acquisition of property, plant or equipment
Nil

Directors' Declaration

In accordance with a resolution of the Directors of BrainChip Holdings Ltd, I state that:

In the opinion of the Directors:

(a) the financial statements and notes of the Company and of the Group are in accordance with the *Corporations Act 2001*, including:

(i) giving a true and fair view of the Company's and the Group's financial position as at 31 December 2020 and of their performance for the year ended on that date; and

(ii) complying with the Australian Accounting Standards (including the Australian Accounting Interpretations) and *Corporations Regulations 2001*; and

(b) the financial statements and notes also comply with International Financial Reporting Standards as disclosed in Note 2(b) and;

(c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable; and

(d) this declaration has been made after receiving the declarations required to be made to the Directors in accordance with section 295A of the *Corporations Act 2001* for the financial year ended 31 December 2020.

On behalf of the Board.

Emmanuel T. Hernandez
Chair
California, U.S.A., 24 February 2021

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Independent auditor's report to the members of BrainChip Holdings Ltd

Report on the audit of the financial report

Opinion

We have audited the financial report of BrainChip Holdings Ltd (the Company) and its subsidiaries (collectively the Group), which comprises the consolidated statement of financial position as at 31 December 2020, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

a. Giving a true and fair view of the consolidated financial position of the Group as at 31 December 2020 and of its consolidated financial performance for the year ended on that date; and

b. Complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial report of the current year. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

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We have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial report. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial report.

Financial instruments

Why significant	How our audit addressed the key audit matter
As disclosed in Notes 19 and 22 to the financial statements, the Group entered into a Put Option Agreement (POA) with LDA Capital Limited and LDA Capital LLC (together LDA Capital) to provide funding of up to A$45 million with a minimum commitment of A$20 million. The accounting treatment, classification and valuation of the financial instruments was complex due to significant judgement involved in identifying and valuing the derivative asset and derivative liability at inception and through to the balance date. Fair value movements in the derivatives are driven by movements in the financial markets. Refer to note 2(h) of the financial report for a description of the applied accounting policy. As such this matter was determined to be a key audit matter.	Our audit procedures included the following: ► Examining the agreements to understand the key terms and conditions. ► Evaluating the Group's accounting treatment of the financial instruments in accordance with the applicable Australian Accounting Standards. ► Assessing the Group's valuations of the derivative liabilities - options, including the methodology used for the valuations. ► Vouching the cash received from the exercise of options. ► Assessing the valuation of the derivative asset – put option premium, including assessing the methodology used for the valuations by management's specialist. ► Testing the calculation of fair value movements on the derivatives and the corresponding impact on the Statement of Profit and Loss and Other Comprehensive Income. ► Engaging our internal valuation specialists to assess the reasonableness of the assumptions used in the derivative liability valuation. ► Assessing the adequacy of the presentation and disclosures included in Notes 2(h), 19 and 22 to the financial statements, including whether the classifications and disclosures were presented in accordance with the applicable Australian Accounting Standards.

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Share-based payments

Why significant	How our audit addressed the key audit matter
As disclosed in Note 25 to the financial statements, the Group has awarded significant share-based payments to employees, directors, and consultants during the year, contributing to a total share-based payment expense of approximately US$1.4 million. The valuation of share-based payments is complex and involves the use of subjective assumptions that have a material effect on the financial statements. As such this matter was determined to be a key audit matter.	Our audit procedures included the following: ► Assessing the Group's determination of share-based payment expense to ensure the balances were calculated in accordance with the applicable Australian Accounting Standards. ► Engaging our internal valuation specialists to assess the Group's calculation of the fair value of share-based payments issued during the year, including assessing the key assumptions used. ► Assessing the adequacy of the disclosures included in Note 25 to the financial statements, including whether the classifications and disclosures were presented in accordance with the applicable Australian Accounting Standards.

Information other than the financial report and auditor's report thereon

The directors are responsible for the other information. The other information comprises the information included in the Company's 2020 Annual Report, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon, with the exception of the Remuneration Report and our related assurance opinion.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the financial report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

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In preparing the financial report, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

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- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated to the directors, we determine those matters that were of most significance in the audit of the financial report of the current year and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on the audit of the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in pages 14 to 25 of the directors' report for the year ended 31 December 2020.

In our opinion, the Remuneration Report of BrainChip Holdings Ltd for the year ended 31 December 2020, complies with section 300A of the *Corporations Act 2001*.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

Ernst & Young

J K Newton
Partner
Perth
25 February 2021

Additional Shareholder Information as at 31 January 2021

(a) Top 20 Shareholders	Number of Shares	%
MR PETER ADRAIN VAN DER MADE	176,305,508	10.818%
MERRILL LYNCH (AUSTRALIA) NOMINEES PTY LIMITED	119,205,377	7.314%
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED - A/C 2	114,093,915	7.001%
CITICORP NOMINEES PTY LIMITED	54,023,572	3.315%
J P MORGAN NOMINEES AUSTRALIA PTY LIMITED	52,770,144	3.238%
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	20,734,547	1.272%
MR LOUIS DINARDO	11,779,362	0.723%
LDA CAPITAL LIMITED	11,145,556	0.684%
MR ADAM OSSEIRAN & MRS REBECCA OSSEIRAN-MOISSON <OSSEIRAN FAMILY A/C>	9,338,500	0.573%
CROSSFIELD INTECH NOMINEES PTY LTD <LIEBESKIND FAMILY S/FUND A/C>	9,338,500	0.573%
NERONA PTE LTD	8,050,000	0.494%
MR PAUL GLENDON HUNTER	8,000,000	0.491%
BRISPOT NOMINEES PTY LTD <HOUSE HEAD NOMINEE A/C>	7,253,083	0.445%
COMSEC NOMINEES PTY LIMITED	7,199,542	0.442%
BNP PARIBAS NOMINEES PTY LTD <IB AU NOMS RETAILCLIENT DRP>	6,806,907	0.418%
MR JEFFREY BRIAN WILTON	5,620,000	0.345%
MR DAVID JAMES EVANS	5,500,000	0.337%
EQUITY TRUSTEES LIMITED <BRAINCHIPHOLD LTD LTIPUNALL>	5,370,000	0.330%
BNP PARIBAS NOMS PTY LTD <DRP>	5,358,947	0.329%
ARVADA PTY LTD	5,250,000	0.322%
Total Shares - Top 20 Holdings	**643,143,460**	**39.463%**
Total Shares	**1,629,737,144**	

(1) 115,589,833 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Limited on behalf of Mr Mankar.

(b) (i) Distribution of quoted fully paid ordinary shares

Size of parcel	Number of share holders	Number of shares	%
1 to 1,000	3,236	2,551,906	0.16
1,001 to 5,000	15,260	41,362,388	2.54
5,001 to 10,000	6,490	51,677,797	3.17
10,001 to 100,000	10,335	326,958,982	20.06
100,001 and over	1,551	1,207,186,071	74.07
Total	**36,872**	**1,629,737,144**	**100.0**

There are 2,028 holders with less than a marketable parcel of ordinary shares based on the Company's closing market price of $0.545 on 31 January 2021.

Additional Shareholder Information as at 31 January 2021

(ii) Distribution of unquoted securities

Size of parcel	Number of Option holders	Number of options	Number of perfor-mance rights holders	Number of perform-ance rights	Number of restricted stock unit holders	Number of restricted stock units
1 to 1,000	-	-	-	-	-	-
1,001 to 5,000	-	-	-	-	-	-
5,001 to 10,000	-	-	-	-	-	-
10,001 to 100,000	1	100,000	2	25,000	4	387,500
100,001 and over	36	149,920,000	-	-	10	4,075,000
Total	**37**	**150,020,000**	**2**	**25,000**	**14**	**4,462,500**

(c) Substantial Shareholders

Substantial Shareholders	%	Number of shares
MR PETER AJ VAN DER MADE	10.82	176,305,508
MERRILL LYNCH (AUSTRALIA) NOMINEES PTY LIMITED (1)	7.31	119,205,377
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	7.00	114,093,915

(1) 115,589,833 fully paid ordinary shares are held by Merrill Lynch (Australia) Nominees Pty Limited on behalf of Mr Mankar.

(d) Voting Rights

The voting rights for each class of security on issue are:

Ordinary fully paid shares
Each ordinary shareholder is entitled to one vote for each share held.

Options
The holders of options have no voting rights. Upon exercise of the option, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.

Performance Rights
The holders of performance rights have no voting rights. Upon vesting of the performance rights, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.

Restricted Stock Units
The holders of restricted stock units have no voting rights. Upon vesting of the restricted stock units, the holders will be holders of fully paid ordinary shares and therefore will have voting rights as afforded to shareholders of these securities.