

## AAC Technologies Holdings (2018 HK) : BUY

Mkt. Cap: US\$8,690m | 3m Avg. Daily Val: US\$70.1m

Last Traded Price ( 8 Nov 2018): HK\$55.80

Price Target 12-mth: HK\$80.00 (43.4% upside) (Prev HK\$165.0)

### Analyst

Susanna Chui +852 36684194; susanna\_chui@dbs.com  
Tsz-Wang TAM, CFA +852 36684195; tszwangtam@dbs.com

### Company Guide



Summary of our point of view, and highlights the relevant data points, which are actively tracked

[AAC Technologies - iBanking Login](#)

[AAC Technologies - Institution Login](#)

## 3Q18 results below; strong optics with wider hybrid lens adoption to drive FY19F earnings

- 3Q18 results below; due to market share loss in acoustics and haptics, on absence of major upgrades for new iPhone launched in 2H18
- Haptics to continue to be sluggish in FY19F; but acoustics to recover in FY19F with upgrades for new iPhone to be launched in 2H19
- Earnings to recover from strong optics with wider hybrid lens adoption in FY19F, with its proprietary WLG
- Reiterate BUY on still solid earnings CAGR of 24% over FY18-20F; TP adjusted from HK\$165 to HK\$80 on lower earnings forecast and target multiple

### Forecasts and Valuation

FY Dec (RMB m)	2017A	2018F	2019F	2020F
Turnover	21,119	22,041	26,579	31,257
EBITDA	7,467	6,689	8,002	9,980
Pre-tax Profit	5,996	4,929	5,932	7,547
Net Profit	5,325	4,377	5,268	6,702
Net Pft (Pre Ex) (core profit)	5,325	4,377	5,268	6,702
Net Profit Gth (Pre-ex) (%)	32.3	(17.8)	20.4	27.2
EPS (RMB)	4.35	3.57	4.30	5.47
EPS (HK\$)	4.91	4.03	4.85	6.18
Core EPS (HK\$)	4.91	4.03	4.85	6.18
Core EPS (RMB)	4.35	3.57	4.30	5.47
EPS Gth (%)	32.6	(17.8)	20.4	27.2
Core EPS Gth (%)	32.6	(17.8)	20.4	27.2
Diluted EPS (HK\$)	4.91	4.03	4.85	6.18
DPS (HK\$)	1.98	1.63	1.96	2.50
BV Per Share (HK\$)	16.21	18.98	21.55	24.70
PE (X)	11.3	13.8	11.5	9.0
Core PE (X)	11.3	13.8	11.5	9.0
P/Cash Flow (X)	10.3	9.7	9.4	7.5
P/Free CF (X)	113.6	34.7	34.4	24.6
EV/EBITDA (X)	8.4	9.3	7.9	6.4
Net Div Yield (%)	3.6	2.9	3.5	4.5
P/Book Value (X)	3.4	2.9	2.6	2.3
Net Debt/Equity (X)	0.1	0.1	0.1	0.1
ROAE (%)	33.5	23.0	24.0	26.8
Earnings Rev (%)		(30)	(35)	(34)
Consensus EPS (RMB)		3.80	4.48	5.23
Other Broker Recs:		B:17	S:4	H:16

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"), Thomson Reuters

### What's New

#### 3Q18 results below; lower-than-expected revenue GPM.

Revenue declined 8.5% y-o-y to Rmb4,869m, below market expectations' Rmb5,637m, due to market share loss in acoustics and haptics, as there were no major acoustics and haptics upgrades for new iPhone that was launched in 2H18. Gross profit margin (GPM) declined to 37.1% in 3Q18, versus 41.3% in 3Q17, below market expectations of 39.2%. Net profit fell 28.7% y-o-y to Rmb973m, below market estimate of Rmb1,350m.

#### Market share loss in acoustics and haptics in FY18F, as there were no major upgrades for new iPhone launched in 2H18.

Without major acoustics and haptics upgrades in 2H18's new iPhone, we estimate AAC, as a technology leader, lost c.10% share in acoustics and haptics for Apple's (AAPL US) new iPhone, while Luxshare (002475 CH), the third supplier for iPhone's acoustics and haptics components, gains c.10% share, based on our channel checks. We expect AAC's dynamic component/ haptics & RF mechanical revenue growth to moderate to 3.8%/ -5.0% in FY18F.

#### Acoustics to recover in FY19F with upgrades on full-screen design without notches for 2H19's new iPhone.

We expect the new iPhone in 2H19 will adopt a full-screen design without notches (receiver hole may no longer be placed at the front of the smartphones) and this may require receivers to be placed under the display screen. Hence, this will lead to upgrades in receivers, and thus higher acoustics dollar content. We estimate AAC's market share in acoustics to be c.35% for 2H19F new iPhone, versus c.30% for 2H18F new iPhone. We expect dynamics component revenue growth to recover to 27.7% in FY19F.



Live more, Bank less

**Flash Note**

---

**Sluggish haptics in FY19F on absence of major upgrades for 2H19's new iPhone; haptics upside rests on potential foldable phone trend.**

Management expects no major upgrades in haptics for 2H19's new iPhone. We estimate AAC's market share in acoustics to be c.45% for 2H19F new iPhone, versus c.50% for 2H18F new iPhone. We expect haptics & RF mechanical revenue to continue to drop 3.6% y-o-y in FY19F. However, Samsung (005930 KS) just officially announced that it will launch a foldable smartphone model in 2019, which requires two haptics on each side of the smartphone. If Apple and China smartphone vendors follow suit, this would lead to upside for haptics shipments.

**Strong optics with wider hybrid lens adoption in FY19F, with its proprietary WLG.**

As glass lenses can achieve better optical performance (i.e. in terms of higher pixels and optical zoom), high-end smartphones have started to adopt hybrid lens sets (i.e. plastic lens + glass lens based on its wafer-level glass [WLG]) to replace plastic lens sets. AAC has begun its first shipments hybrid lens sets for Huawei's newly launched Mate 20 Pro. We expect the adoption of hybrid lens sets to rise in FY19F, with higher ASP of US\$3, versus

plastic lens sets' US\$1-2. AAC's proprietary WLG lenses are well positioned to benefit from demand for hybrid lens sets, with their higher scalability and temperature tolerance versus competitors' moulding or wafer-level optics (WLO). We expect AAC's optics revenue to ramp up to Rmb2,993m and account for 12.6% of FY19F revenue.

**Reiterate BUY; TP adjusted from HK\$165 to HK\$80.** We incorporated lower revenue and margins, due to market share loss in acoustics and haptics in FY18F, without major acoustics and haptics upgrade. We accordingly revised our net profit down by 29.6-35.0% for FY18/19F. We expect net profit to decline 17.8% in FY18F, before picking up strongly by 20.4% in FY19F, driven by a recovery in acoustics in FY19F with upgrades on full-screen design without notches for 2H19's new iPhone and strong optics with wider hybrid lens adoption in FY19F. We maintain our BUY rating on AAC, with its still solid earnings CAGR of 23.7% over FY18-20F, but adjust our TP from HK\$165 to HK\$80, on lower earnings forecast and target multiple from 20x (one standard deviation above historical average) to 17x (historical average) FY19F PE.

**Flash Note**
**Quarterly Income Statement (RMB m)**

<b>FY March</b>	<b>3Q17</b>	<b>4Q17</b>	<b>1Q18</b>	<b>2Q18</b>	<b>3Q18</b>
<b>Revenue</b>					
Dynamic components	2,555	2,799	2,412	1,885	2,483
Haptics & RF mechanical	2,416	3,994	1,948	1,506	1,863
MEMS components	299	286	186	151	328
Other products	53	72	93	244	195
<b>Total revenue</b>	<b>5,324</b>	<b>7,151</b>	<b>4,638</b>	<b>3,786</b>	<b>4,869</b>
Cost of good sold	(3,124)	(4,171)	(2,874)	(2,455)	(3,065)
<b>Total gross profit</b>	<b>2,199</b>	<b>2,979</b>	<b>1,764</b>	<b>1,331</b>	<b>1,804</b>
Selling expenses	(104)	(131)	(73)	(66)	(80)
Administrative expenses	(170)	(195)	(140)	(138)	(153)
Amortisation of intangible assets					
Research and development expenses	(411)	(525)	(362)	(361)	(397)
Interest Income	0	0	0	0	0
Other income	32	(20)	97	47	55
<b>Operating profit</b>	<b>1,546</b>	<b>2,109</b>	<b>1,287</b>	<b>813</b>	<b>1,229</b>
Interest expenses	(44)	(53)	(51)	(52)	(58)
Associates	(2)	(1)	0	0	0
<b>Pre-tax profit</b>	<b>1,499</b>	<b>2,056</b>	<b>1,236</b>	<b>761</b>	<b>1,172</b>
Taxation	(133)	(224)	(110)	(109)	(198)
Minority Interests	(0)	(0)	0	0	0
<b>Net profit</b>	<b>1,366</b>	<b>1,832</b>	<b>1,126</b>	<b>652</b>	<b>973</b>
<b>Growth (QoQ)</b>					
Dynamic components	13.4%	9.5%	-13.8%	-21.9%	31.8%
Haptics & RF mechanical	23.4%	65.4%	-51.2%	-22.7%	23.7%
MEMS components	125.3%	-4.5%	-35.1%	-18.4%	116.4%
Other products	-38.4%	34.3%	29.7%	163.3%	-20.2%
Total Revenue	20.2%	34.3%	-35.1%	-18.4%	28.6%
Gross profit	23.1%	35.5%	-40.8%	-24.6%	35.6%
Operating profit	23.3%	36.5%	-39.0%	-36.8%	51.3%
Net profit	28.2%	34.1%	-38.5%	-42.1%	49.2%
<b>Growth (YoY)</b>					
Dynamic components			27.2%	-16.3%	-2.8%
Haptics & RF mechanical			-11.1%	-23.1%	-22.9%
MEMS components			46.7%	14.0%	9.5%
Other products				182.5%	265.8%
Total Revenue			10.0%	-14.5%	-8.5%
Gross profit			0.6%	-25.6%	-18.0%
Operating profit			2.2%	-35.2%	-20.5%
Net profit			6.1%	-38.8%	-28.7%
<b>Margins</b>					
Gross profit	41.3%	41.7%	38.0%	35.1%	37.1%
Net profit	25.7%	25.6%	24.3%	17.2%	20.0%

Source: Company, DBS Vickers

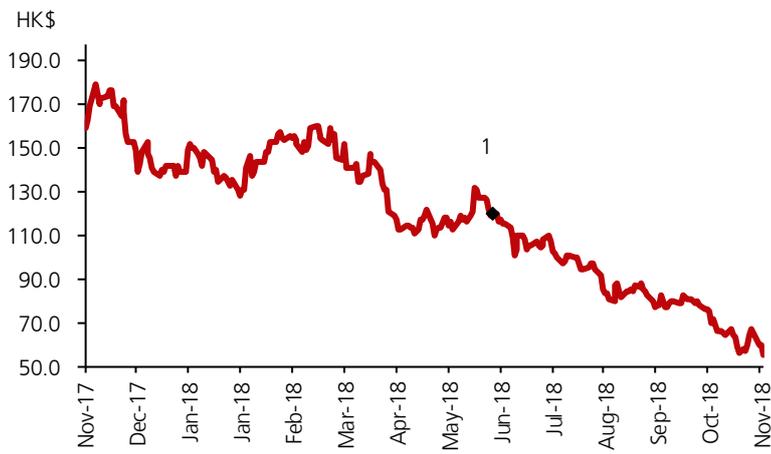
**Flash Note**
**Key assumptions**

	FY16	FY17	FY18F	FY19F	FY20F
<b>Revenue (Rmb m)</b>					
Dynamic components	7,956	9,580	9,941	12,692	14,120
Haptics & RF mechanical	6,940	10,496	9,972	9,614	9,914
MEMS components	535	848	1,135	1,279	1,420
Other products	75	196	993	2,993	5,802
Total	15,507	21,119	22,041	26,579	31,257
<b>Growth</b>					
Dynamic components	29.3%	20.4%	3.8%	27.7%	11.2%
Haptics & RF mechanical	56.3%	51.2%	-5.0%	-3.6%	3.1%
MEMS components	-45.9%	58.3%	34.0%	12.6%	11.0%
Other products	-51.3%	159.5%	407.3%	201.3%	93.8%
Total	32.1%	36.2%	4.4%	20.6%	17.6%
<b>GPM</b>					
Dynamic components	45.5%	40.8%	39.0%	38.5%	38.0%
Haptics & RF mechanical	40.1%	43.6%	39.0%	38.5%	38.0%
MEMS components	8.8%	22.4%	30.0%	35.0%	40.0%
Other products	-12.5%	22.3%	10.0%	25.0%	40.0%
Total	41.5%	41.3%	37.2%	36.8%	38.5%

Source: Company, DBS Vickers

**Flash Note**

**Target Price & Ratings History**



S.No.	Date	Closing Price	12-mth Target Price	Rating
1:	15-Jun-18	HK\$119.40	HK\$165	Buy

Source: DBS HK

Analyst: Susanna Chui

Tsz-Wang TAM, CFA

**Flash Note**

DBS HK recommendations are based on Absolute Total Return\* Rating system, defined as follows:

**STRONG BUY** (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

**BUY** (>15% total return over the next 12 months for small caps, >10% for large caps)

**HOLD** (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

**FULLY VALUED** (negative total return i.e. > -10% over the next 12 months)

**SELL** (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

*Share price appreciation + dividends*

Completed Date: 9 Nov 2018 08:31:38 (HKT)

Dissemination Date: 9 Nov 2018 09:30:04 (HKT)

Sources for all charts and tables are DBS HK unless otherwise specified.

**GENERAL DISCLOSURE/DISCLAIMER**

**This report is prepared by DBS Bank (Hong Kong) Limited ("DBS HK").** This report is solely intended for the clients of DBS Bank Ltd., DBS HK, DBS Vickers (Hong Kong) Limited ("DBSV HK"), and DBS Vickers Securities (Singapore) Pte Ltd. ("DBSVS"), its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS HK.

The research set out in this report is based on information obtained from sources believed to be reliable, but we (which collectively refers to DBS Bank Ltd., DBS HK, DBSV HK, DBSVS, its respective connected and associated corporations, affiliates and their respective directors, officers, employees and agents (collectively, the "DBS Group") have not conducted due diligence on any of the companies, verified any information or sources or taken into account any other factors which we may consider to be relevant or appropriate in preparing the research. Accordingly, we do not make any representation or warranty as to the accuracy, completeness or correctness of the research set out in this report. Opinions expressed are subject to change without notice. This research is prepared for general circulation. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees, who should obtain separate independent legal or financial advice. The DBS Group accepts no liability whatsoever for any direct, indirect and/or consequential loss (including any claims for loss of profit) arising from any use of and/or reliance upon this document and/or further communication given in relation to this document. This document is not to be construed as an offer or a solicitation of an offer to buy or sell any securities. The DBS Group, along with its affiliates and/or persons associated with any of them may from time to time have interests in the securities mentioned in this document. The DBS Group, may have positions in, and may effect transactions in securities mentioned herein and may also perform or seek to perform broking, investment banking and other banking services for these companies.

Any valuations, opinions, estimates, forecasts, ratings or risk assessments herein constitutes a judgment as of the date of this report, and there can be no assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments. The information in this document is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed, it may not contain all material information concerning the company (or companies) referred to in this report and the DBS Group is under no obligation to update the information in this report.

This publication has not been reviewed or authorized by any regulatory authority in Singapore, Hong Kong or elsewhere. There is no planned schedule or frequency for updating research publication relating to any issuer.

The valuations, opinions, estimates, forecasts, ratings or risk assessments described in this report were based upon a number of estimates and assumptions and are inherently subject to significant uncertainties and contingencies. It can be expected that one or more of the estimates on which the valuations, opinions, estimates, forecasts, ratings or risk assessments were based will not materialize or will vary significantly from actual results. Therefore, the inclusion of the valuations, opinions, estimates, forecasts, ratings or risk assessments described herein IS NOT TO BE RELIED UPON as a representation and/or warranty by the DBS Group (and/or any persons associated with the aforesaid entities), that:

- (a) such valuations, opinions, estimates, forecasts, ratings or risk assessments or their underlying assumptions will be achieved, and
- (b) there is any assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments stated therein.

Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets.

Any assumptions made in this report that refers to commodities, are for the purposes of making forecasts for the company (or companies) mentioned herein. They are not to be construed as recommendations to trade in the physical commodity or in the futures contract relating to the commodity referred to in this report.

DBS Vickers Securities (USA) Inc ("DBSVUSA"), a US-registered broker-dealer, does not have its own investment banking or research department, has not participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months and does not engage in market-making.

**Flash Note****ANALYST CERTIFICATION**

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible for the content of this research report, in part or in whole, certifies that he or his associate<sup>1</sup> does not serve as an officer of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant) and the research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests<sup>2</sup> in relation to an issuer or a new listing applicant that the analyst reviews. DBS Group has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the DBS Group and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of DBS Group's compensation to any specific investment banking function of the DBS Group.

**COMPANY-SPECIFIC / REGULATORY DISCLOSURES**

1. DBS Bank Ltd, DBS HK, DBSVS or their subsidiaries and/or other affiliates have proprietary positions in Aac Technologies Holdings Incorporated (2018 HK) recommended in this report as of 06 Nov 2018.
2. Neither DBS Bank Ltd nor DBS HK market makes in equity securities of the issuer(s) or company(ies) mentioned in this Research Report.
3. **Compensation for investment banking services:**  
DBSVUSA does not have its own investment banking or research department, nor has it participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months. Any US persons wishing to obtain further information, including any clarification on disclosures in this disclaimer, or to effect a transaction in any security discussed in this document should contact DBSVUSA exclusively.
4. **Disclosure of previous investment recommendation produced:**  
DBS Bank Ltd, DBSVS, DBS HK, their subsidiaries and/or other affiliates of DBSVUSA may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by DBS Bank Ltd, DBS HK, DBSVS, their subsidiaries and/or other affiliates of DBSVUSA in the preceding 12 months.

---

<sup>1</sup> An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

<sup>2</sup> Financial interest is defined as interests that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

**Flash Note**

**RESTRICTIONS ON DISTRIBUTION**

<b>General</b>	This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.
<b>Australia</b>	This report is being distributed in Australia by DBS Bank Ltd, DBSVS or DBSV HK. DBS Bank Ltd holds Australian Financial Services Licence no. 475946.  DBSVS and DBSV HK are exempted from the requirement to hold an Australian Financial Services Licence under the Corporation Act 2001 ("CA") in respect of financial services provided to the recipients. Both DBS Bank Ltd and DBSVS are regulated by the Monetary Authority of Singapore under the laws of Singapore, and DBSV HK is regulated by the Hong Kong Securities and Futures Commission under the laws of Hong Kong, which differ from Australian laws.  Distribution of this report is intended only for "wholesale investors" within the meaning of the CA.
<b>Hong Kong</b>	This report is being distributed in Hong Kong by DBS Bank Ltd, DBS Bank (Hong Kong) Limited and DBS Vickers (Hong Kong) Limited, all of which are registered with or licensed by the Hong Kong Securities and Futures Commission to carry out the regulated activity of advising on securities.
<b>Indonesia</b>	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
<b>Malaysia</b>	This report is distributed in Malaysia by AllianceDBS Research Sdn Bhd ("ADBSR"). Recipients of this report, received from ADBSR are to contact the undersigned at 603-2604 3333 in respect of any matters arising from or in connection with this report. In addition to the General Disclosure/Disclaimer found at the preceding page, recipients of this report are advised that ADBSR (the preparer of this report), its holding company Alliance Investment Bank Berhad, their respective connected and associated corporations, affiliates, their directors, officers, employees, agents and parties related or associated with any of them may have positions in, and may effect transactions in the securities mentioned herein and may also perform or seek to perform broking, investment banking/corporate advisory and other services for the subject companies. They may also have received compensation and/or seek to obtain compensation for broking, investment banking/corporate advisory and other services from the subject companies.    Wong Ming Tek, Executive Director, ADBSR
<b>Singapore</b>	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 196800306E) or DBSVS (Company Regn No. 198600294G), both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, DBS Bank Ltd accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
<b>Thailand</b>	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.
<b>United Kingdom</b>	This report is produced by DBS HK which is regulated by the Hong Kong Monetary Authority  This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom.  In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.
<b>Dubai International Financial Centre</b>	This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at units 608-610, 6th Floor, Gate Precinct Building 5, PO Box 506538, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.

**Flash Note**

<b>United Arab Emirates</b>	This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.
<b>United States</b>	This report was prepared by DBS HK. DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.
<b>Other jurisdictions</b>	In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.

**DBS Bank (Hong Kong) Limited**11<sup>th</sup> Floor The Centre, 99 Queen's Road Central, Central, Hong Kong

Tel: (852) 3668-4181, Fax: (852) 2521-1812

**Flash Note**

---

**DBS Regional Research Offices**

---

**HONG KONG**

**DBS Bank (Hong Kong) Ltd**  
**Contact: Carol Wu**  
11th Floor The Centre  
99 Queen's Road Central  
Central, Hong Kong  
Tel: 852 3668 4181  
Fax: 852 2521 1812  
e-mail: dbsvhk@dbs.com

**MALAYSIA**

**AllianceDBS Research Sdn Bhd**  
**Contact: Wong Ming Tek (128540 U)**  
19th Floor, Menara Multi-Purpose,  
Capital Square,  
8 Jalan Munshi Abdullah 50100  
Kuala Lumpur, Malaysia.  
Tel.: 603 2604 3333  
Fax: 603 2604 3921  
e-mail: general@alliancedbs.com

**SINGAPORE**

**DBS Bank Ltd**  
**Contact: Janice Chua**  
12 Marina Boulevard,  
Marina Bay Financial Centre Tower 3  
Singapore 018982  
Tel: 65 6878 8888  
Fax: 65 65353 418  
e-mail: equityresearch@dbs.com  
Company Regn. No. 196800306E

**INDONESIA**

**PT DBS Vickers Sekuritas (Indonesia)**  
**Contact: Maynard Priajaya Arif**  
DBS Bank Tower  
Ciputra World 1, 32/F  
Jl. Prof. Dr. Satrio Kav. 3-5  
Jakarta 12940, Indonesia  
Tel: 62 21 3003 4900  
Fax: 6221 3003 4943  
e-mail: research@id.dbsvickers.com

**THAILAND**

**DBS Vickers Securities (Thailand) Co Ltd**  
**Contact: Chanpen Sirithanarattanakul**  
989 Siam Piwat Tower Building,  
9th, 14th-15th Floor  
Rama 1 Road, Pathumwan,  
Bangkok Thailand 10330  
Tel. 66 2 857 7831  
Fax: 66 2 658 1269  
e-mail: research@th.dbs.com  
Company Regn. No 0105539127012  
Securities and Exchange Commission, Thailand