

| | | | | |
|------------|------------|--------------|--------|---------------|
| Technology | Last Close | Target Price | Upside | 20 April 2018 |
| | HK\$19.16 | HK\$23.00 | +20% | |

Hua Hong Semiconductor (1347 HK)

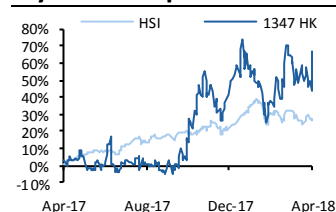
One of the best semis plays in China; reiterate Buy

- ZTE export ban renews focus on China semis:** With the US Department of Commerce activating the export ban on ZTE (763 HK/Sell) earlier this week, the market is expecting a bigger push in China to create a self-sufficient semiconductor industry. We believe the push to drive the fabless industry competitiveness should be the focus, and expect the 2nd phase of China IC Fund (as reported by media) to shift its focus toward the fabless segment, as the 1st phase put greater emphasis on capacity expansion (foundry and memory).
- We see Hua Hong as one of the best semis plays in China:** We reiterate our positive view on Hua Hong given that: (1) it is a major beneficiary of China's semis growth (55% of revenue from China fabless); (2) its new capacity in Wuxi (to ramp up in late 2019) will unlock longer-term growth potential; (3) 8" demand outlook is solid with drivers such as smart cards, MCU and PMIC; (4) valuation is attractive; and (5) it has a healthy balance sheet with stable dividends. Compared to both HK-listed and A-share listed semis names, we believe it is one of the most preferred and less volatile given its stable earnings and prudent approach to growth.
- TSMC guidance suggests near-term softness for foundry sector.** TSMC (2330 TT) reported 1Q18 results yesterday and guided for 2Q18 revenue to fall 7-8% QoQ citing smartphone weakness and uncertainty over crypto-currency demand (ASIC and GPU). It also lowered its full-year revenue growth estimate to 10% YoY (vs. previous 10-15%). While China smartphone sector is gradually picking up after softness since 4Q17, TSMC cited weakness in the high-end segment (which we believe is Apple related). We believe foundries with 28nm exposure should give sub-seasonal guidance in 2Q18, while 8" foundries (incl. Hua Hong) should be solid as demand remains healthy.
- Valuation remains attractive; reiterate Buy:** While the company's shares rallied 25% over the past two days, valuation remains attractive with shares trading at 1.5x 2018E P/B. On a P/B to ROE basis, we still see its valuation as attractive vs. regional peers, despite having an additional China semis growth driver. We continue to prefer Hua Hong over SMIC (981 HK/Neutral) due to healthier earnings outlook. Our unchanged TP of HK\$23 is based on 1.5x 2020E P/B. Reiterate **Buy**.

Stock Rating

BUY

1-year stock performance



Source: Bloomberg

Stock data

| | |
|---------------------|-----------|
| 52w high (HK\$) | 19.82 |
| 52w low (HK\$) | 9.92 |
| Market cap (HK\$ m) | 19,918.88 |
| Avg daily vol (m) | 5.84 |
| YTD change (%) | 15.56 |
| 200d MA (HK\$) | 13.45 |

Source: Bloomberg

Chris Yim

christopher.yim@bocomgroup.com
(852) 3766 1803

Xinhe Deng

xinhe.deng@bocomgroup.com
(852) 3766 1856

Financial highlights

| Y/E 31 Dec | 2016 | 2017 | 2018E | 2019E | 2020E |
|---------------------|-------|-------|-------|-------|-------|
| Revenue (US\$ m) | 721 | 808 | 893 | 999 | 1,222 |
| YoY growth (%) | 11 | 12 | 11 | 12 | 22 |
| Net profit (US\$ m) | 129 | 145 | 168 | 187 | 224 |
| EPS (US cents) | 12.42 | 13.91 | 13.04 | 14.50 | 17.38 |
| YoY growth (%) | 14 | 12 | -6 | 11 | 20 |
| P/E (x) | 19.7 | 17.6 | 18.8 | 16.9 | 14.1 |
| BVPS (US\$) | 1.4 | 1.6 | 1.7 | 1.8 | 1.9 |
| P/B (x) | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 |
| Dividend yield (%) | 1.4 | 1.5 | 1.4 | 1.6 | 1.8 |

Source: Company data, BOCOM Int'l estimates

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Figure 1: Hua Hong (1347 HK) quarterly earnings forecasts

| (US\$ m) | 1Q17 | 2Q17 | 3Q17 | 4Q17 | 1Q18E | 2Q18E | 3Q18E | 4Q18E | 1Q19E | 2Q19E | 3Q19E | 4Q19E | 2017 | 2018E | 2019E | 2020E |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|
| Revenue | 183 | 198 | 210 | 217 | 209 | 221 | 229 | 233 | 226 | 233 | 253 | 288 | 808 | 893 | 999 | 1,222 |
| Seq % | -6 | 8 | 6 | 3 | -4 | 6 | 3 | 2 | -3 | 3 | 9 | 14 | 12 | 11 | 12 | 22 |
| COGS | 129 | 132 | 136 | 144 | 146 | 148 | 149 | 154 | 156 | 155 | 165 | 196 | 541 | 597 | 672 | 823 |
| % of sales | 70 | 67 | 65 | 66 | 70 | 67 | 65 | 66 | 69 | 67 | 66 | 68 | 67 | 67 | 67 | 67 |
| Gross profit | 54 | 66 | 74 | 73 | 63 | 73 | 80 | 79 | 70 | 78 | 87 | 92 | 267 | 296 | 327 | 399 |
| GPM% | 29.7 | 33.2 | 35.3 | 33.7 | 30.1 | 33.0 | 35.0 | 34.0 | 31.0 | 33.5 | 34.5 | 32.0 | 33.1 | 33.1 | 32.8 | 32.7 |
| OPEX | 22 | 27 | 29 | 37 | 26 | 31 | 31 | 37 | 27 | 31 | 35 | 44 | 116 | 124 | 136 | 165 |
| % of sales | 12.2 | 13.8 | 14.0 | 17.0 | 12.3 | 13.9 | 13.4 | 15.7 | 11.9 | 13.4 | 13.7 | 15.2 | 14.3 | 13.9 | 13.7 | 13.5 |
| Operating profit | 32 | 38 | 45 | 36 | 37 | 42 | 49 | 43 | 43 | 47 | 53 | 48 | 151 | 172 | 191 | 234 |
| OM% | 17.5 | 19.3 | 21.3 | 16.7 | 17.8 | 19.1 | 21.6 | 18.3 | 19.1 | 20.1 | 20.8 | 16.8 | 18.7 | 19.2 | 19.1 | 19.2 |
| Pretax profit | 34 | 41 | 49 | 49 | 41 | 47 | 55 | 57 | 48 | 52 | 59 | 64 | 173 | 200 | 224 | 273 |
| Taxes (benefit) | 0 | 6 | 14 | 7 | 7 | 8 | 9 | 9 | 8 | 8 | 10 | 10 | 27 | 32 | 35 | 38 |
| Net Profit after minorities | 34 | 34 | 35 | 42 | 35 | 40 | 46 | 47 | 41 | 44 | 49 | 53 | 145 | 168 | 187 | 224 |
| Wafer shipments (k 8" equiv) | 432 | 459 | 477 | 501 | 478 | 502 | 512 | 518 | 507 | 517 | 543 | 603 | 1,869 | 2,011 | 2,171 | 2,510 |
| QoQ (%) | -11 | 6 | 4 | 5 | -5 | 5 | 2 | 1 | -2 | 2 | 5 | 11 | | | | |
| YoY (%) | 10 | 4 | 2 | 3 | 11 | 9 | 7 | 3 | 6 | 3 | 6 | 17 | 5 | 8 | 8 | 16 |
| ASP per wafer (US\$) | 414 | 424 | 429 | 424 | 429 | 433 | 437 | 442 | 437 | 441 | 455 | 468 | 423 | 435 | 451 | 478 |
| QoQ (%) | 6 | 2 | 1 | -1 | 1 | 1 | 1 | 1 | -1 | 1 | 3 | 3 | | | | |
| YoY (%) | 1 | 8 | 11 | 9 | 3 | 2 | 2 | 4 | 2 | 2 | 4 | 6 | 7 | 3 | 4 | 6 |
| Revenue by technology (%) | | | | | | | | | | | | | | | | |
| <=13nm | 34 | 32 | 33 | 35 | 35 | 34 | 33 | 36 | 36 | 35 | 37 | 39 | 34 | 35 | 37 | 42 |
| 0.15/0.18um | 18 | 17 | 19 | 15 | 18 | 18 | 19 | 17 | 19 | 18 | 18 | 17 | 17 | 18 | 18 | 16 |
| 0.25um | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 |
| >=0.35um | 47 | 48 | 46 | 47 | 45 | 46 | 45 | 46 | 43 | 45 | 43 | 44 | 47 | 46 | 44 | 41 |
| Capacity (8", thousand) | 465 | 477 | 498 | 504 | 504 | 513 | 525 | 528 | 534 | 534 | 552 | 620 | 1,944 | 2,070 | 2,240 | 2,620 |
| seq% | 0 | 3 | 4 | 1 | 0 | 2 | 2 | 1 | 1 | 0 | 3 | 12 | 7 | 6 | 8 | 17 |

Source: Company data, BOCOM Int'l estimates

20 April 2018

Hua Hong Semiconductor (1347 HK)**Financial Statements**

| Income statement (US\$ m) | | | | | |
|---------------------------------------|------------|------------|------------|------------|------------|
| Y/E 31 Dec | 2016 | 2017 | 2018E | 2019E | 2020E |
| Revenue | 721 | 808 | 893 | 999 | 1,222 |
| COGS | (501) | (541) | (597) | (672) | (823) |
| Gross profit | 220 | 267 | 296 | 327 | 399 |
| Opex | 104 | 116 | 124 | 136 | 165 |
| OP | 116 | 151 | 172 | 191 | 234 |
| Net interest expense | 1 | 5 | 2 | 4 | 4 |
| Equity Method | 7 | 10 | 11 | 12 | 13 |
| Others | 29 | 7 | 16 | 18 | 22 |
| Non-op income | 37 | 21 | 29 | 34 | 39 |
| Pre-tax income | 154 | 173 | 200 | 224 | 273 |
| Tax | 25 | 27 | 32 | 35 | 38 |
| Net income (before minority interest) | 129 | 145 | 168 | 189 | 235 |
| Minority interest | - | - | - | 2 | 11 |
| Net income | 129 | 145 | 168 | 187 | 224 |
| EPS (US cents) | 12.42 | 13.91 | 13.04 | 14.50 | 17.38 |

| Cash flow statement (US\$ m) | | | | | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| Y/E 31 Dec | 2016 | 2017 | 2018E | 2019E | 2020E |
| Net profit | 129 | 145 | 168 | 187 | 224 |
| Depreciation/amortization | 88 | 105 | 113 | 124 | 124 |
| Changes in work capital | (6) | (9) | (7) | (9) | (18) |
| Forex gain/loss | - | - | - | - | - |
| Others | 1 | (10) | - | - | - |
| Cash flow from operations | 212 | 258 | 274 | 302 | 330 |
| Capex | (169) | (136) | (100) | (130) | (130) |
| Sales of tangible assets | - | - | - | - | - |
| Investments | - | - | - | - | - |
| Others | (65) | (61) | (760) | (207) | (268) |
| Cash flow from investing | (233) | (197) | (860) | (337) | (398) |
| Dividends paid | (36) | (40) | (44) | (50) | (56) |
| New share issued | - | 3 | 400 | - | - |
| Debt issuance/(repayment) | (86) | (2) | 100 | 200 | 200 |
| Other | (4) | (2) | - | - | - |
| Cash flow from financing | (125) | (41) | 456 | 150 | 144 |
| Other | (22) | 13 | - | - | - |
| Net cash flow | (169) | 34 | (129) | 115 | 76 |
| Cash at beginning | 510 | 341 | 375 | 246 | 361 |
| Cash at end | 341 | 375 | 246 | 361 | 437 |

| Balance sheet (US\$ m) | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|
| As of 31 Dec | 2016 | 2017 | 2018E | 2019E | 2020E |
| Cash & cash equiv. | 341 | 375 | 246 | 361 | 437 |
| Marketable securities | 126 | 194 | 194 | 194 | 194 |
| Account receivables | 144 | 159 | 176 | 197 | 241 |
| Inventory | 95 | 116 | 128 | 143 | 175 |
| Others | 9 | 10 | 10 | 10 | 10 |
| Current assets | 715 | 853 | 753 | 905 | 1,056 |
| Land/CIP | 20 | 21 | 21 | 21 | 21 |
| PP&E, net | 657 | 734 | 720 | 726 | 732 |
| Investment in associates/JV | 45 | 58 | 799 | 982 | 1,201 |
| Investment property | 169 | 180 | 198 | 222 | 272 |
| Intangible asset | 8 | 7 | 7 | 7 | 7 |
| Other fixed assets | 168 | 169 | 169 | 169 | 169 |
| Total assets | 1,827 | 2,078 | 2,667 | 3,031 | 3,457 |
| Accounts payable | 176 | 209 | 231 | 258 | 316 |
| Short-term debt | 2 | 61 | 49 | 50 | 52 |
| Others | 60 | 67 | 67 | 67 | 67 |
| Current liabilities | 238 | 337 | 347 | 375 | 435 |
| Long term debt | 91 | 32 | 144 | 343 | 541 |
| Others | 9 | 14 | 14 | 14 | 14 |
| Total liabilities | 338 | 383 | 505 | 732 | 990 |
| Common stock | 1,550 | 1,555 | 1,955 | 1,955 | 1,955 |
| Reserves | (62) | 140 | 207 | 344 | 512 |
| Shareholder equity | 1,489 | 1,695 | 2,162 | 2,298 | 2,467 |
| minority interest | - | - | - | - | - |
| Total Liabilities & Capital | 1,827 | 2,078 | 2,667 | 3,031 | 3,457 |

Source: Company data, BOCOM Int'l estimates

| Financial ratios | | | | | |
|--------------------|-------|-------|-------|-------|-------|
| Y/E 31 Dec | 2016 | 2017 | 2018E | 2019E | 2020E |
| P/E (x) | 19.7 | 17.6 | 18.8 | 16.9 | 14.1 |
| P/B (x) | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 |
| P/S (x) | 3.5 | 3.2 | 3.5 | 3.2 | 2.6 |
| EV/EBITDA (x) | 11.2 | 8.9 | 10.9 | 10.1 | 9.3 |
| Dividend yield (%) | 1.4 | 1.5 | 1.4 | 1.6 | 1.8 |
| Net debt/equity | (0.2) | (0.2) | (0.0) | 0.0 | 0.1 |
| ROE (%) | 8.6 | 9.1 | 8.7 | 8.4 | 9.4 |
| ROA (%) | 6.9 | 7.4 | 7.1 | 6.6 | 7.3 |
| ROIC (%) | 7.9 | 8.6 | 8.1 | 7.5 | 8.2 |

BOCOM International

10/F, Man Yee Building, 68 Des Voeux Road Central, Central, Hong Kong

Main: (852) 3766 1899 Fax: (852) 2107 4662

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Buy: The stock's total return is expected to **exceed** that of the corresponding industry over the next 12 months.

Neutral: The stock's total return is expected to be **in line with** that of the corresponding industry over the next 12 months.

Sell: The stock's total return is expected to be **below** that of the corresponding industry over the next 12 months.

Not-Rated: The analyst **does not have conviction** regarding the outlook of the stock's total return relative to that of the corresponding industry over the next 12 months.

Analyst Industry Views:

Outperform: The analyst expects the industry coverage universe to be **attractive** relative to the relevant broad market benchmark over the next 12 months.

Market perform: The analyst expects the industry coverage universe to be **in line with** the relevant broad market benchmark over the next 12 months.

Underperform: The analyst expects the industry coverage universe to be **unattractive** relative to the relevant broad market benchmark over the next 12 months.

Broad market benchmark for Hong Kong is **the Hang Seng Composite Index**, for China A-shares is the **MSCI China A Index**, for US-listed Chinese companies is **S&P US Listed China 50 (USD) Index**.

20 April 2018

Hua Hong Semiconductor (1347 HK)



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