

Technology	Last Close	Target Price	Upside	14 June 2018
	HK\$22.50	HK\$28.00↑	+24%	

## Hua Hong Semiconductor (1347 HK)

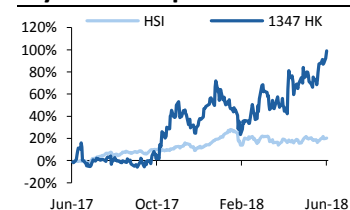
### 2H18 likely better than expected; raise est/TP

- ⊕ **Higher 8" price quote likely in 2H18:** We reiterate our view that 8" demand is strong, driven by growth in automobile semis, industrial automation and IoT. UMC (2303 TT/NR), at its shareholder meeting on 12 June, announced that it will start to raise prices on 8" wafer products due to rising silicon wafer prices (per news report by technews.tw). We believe 8" wafer capacity will remain tight, and in such case, we expect the 8" foundries to: (1) quote higher prices to customers, and (2) further optimize product mix (e.g. utilizing limited capacity for higher-ASP products such as MCU, and reducing discrete products such as MOSFET or diodes).
- ⊕ **Expect solid 2Q18 results; 2H18 likely better than expected:** As we have not seen any meaningful increase in 12" foundries' price quotes, we believe the pure 8" foundries (e.g. Hua Hong and Vanguard) are better positioned in this round of price increase. While we expect 8" price quotes to rise, we believe 2Q18 will probably remain in line with guidance as price increase is unlikely to have an immediate impact (due to 2-month cycle time). We expect price increase, high utilization and further optimization of product mix to lead to upside in 2H18 for Hua Hong.
- ⊕ **Raise est/TP; reiterate Buy:** We reiterate our positive view on Hua Hong on (1) solid near-term outlook due to 8" capacity tightness, (2) a product portfolio well positioned for growth, (3) benefits from semis growth in China, (4) Wuxi fab to unlock capacity bottleneck, and (5) solid balance sheet with stable dividend. We raise our 2018/19/20E EPS by 10%/14%/9% largely on rising wafer ASP. We lift TP to HK\$28.00, based on 1.8x 2020E P/B (vs. previously HK\$23.00 on 1.5x 2020E P/B). Hua Hong remains our 2H18 top pick in tech. Reiterate **Buy**.

### Stock Rating

**BUY**

### 1-year stock performance



Source: Bloomberg

### Stock data

52w high (HK\$)	23.55
52w low (HK\$)	9.92
Market cap (HK\$ m)	23,819.89
Avg daily vol (m)	7.44
YTD change (%)	38.12
200d MA (HK\$)	15.02

Source: Bloomberg

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### Financial highlights

Y/E 31 Dec	2016	2017	2018E	2019E	2020E
Revenue (US\$ m)	721	808	946	1,089	1,255
YoY growth (%)	11	12	17	15	15
Net profit (US\$ m)	129	145	191	214	245
EPS (US cents)	12.42	13.91	15.55	16.60	19.03
YoY growth (%)	14	12	12	7	15
Previous EPS (US cents)			14.17	14.62	17.52
Change (%)			10	14	9
P/E (x)	23.1	20.6	18.4	17.3	15.1
BVPS (US\$)	1.4	1.6	1.8	1.9	2.0
P/B (x)	2.0	1.8	1.6	1.5	1.4
Dividend yield (%)	1.2	1.3	1.2	1.5	1.7

Source: Company data, BOCOM Int'l estimates

Figure 1: We raise our 2018/19E estimates

US\$ m	2018E				2019E			
	Old	New	Change	Chg %	Old	New	Change	Chg %
Revenue	897	946	49	5	999	1,089	90	9
GM%	33.5	34.6	1.0ppt		32.8	34.4	1.6ppts	
OP	177	198	21	12	191	222	31	16
PTI	199	220	21	11	224	257	32	14
NP	174	191	18	10	187	214	27	14
Wafer shipment (k)	1,908	1,951	43	2	2,171	2,172	1	0
Wafer ASP (US\$)	461	476	15	3	451	492	41	9

Source: Company data, BOCOM Int'l estimates

Figure 2: Hua Hong (1347 HK) quarterly earnings forecasts

(US\$ m)	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18E	3Q18E	4Q18E	1Q19E	2Q19E	3Q19E	4Q19E	2017	2018E	2019E	2020E
<b>Revenue</b>	<b>183</b>	<b>198</b>	<b>210</b>	<b>217</b>	<b>210</b>	<b>225</b>	<b>246</b>	<b>265</b>	<b>257</b>	<b>264</b>	<b>272</b>	<b>296</b>	<b>808</b>	<b>946</b>	<b>1,089</b>	<b>1,255</b>
Seq %	-6	8	6	3	-3	7	9	8	-3	3	3	9	12	17	15	15
<b>COGS</b>	<b>129</b>	<b>132</b>	<b>136</b>	<b>144</b>	<b>143</b>	<b>150</b>	<b>156</b>	<b>170</b>	<b>172</b>	<b>172</b>	<b>175</b>	<b>195</b>	<b>541</b>	<b>619</b>	<b>715</b>	<b>833</b>
% of sales	70	67	65	66	68	67	64	64	67	65	65	66	67	65	66	66
Gross profit	54	66	74	73	67	74	90	95	85	93	96	101	267	327	374	422
GPM%	29.7	33.2	35.3	33.7	32.1	33.0	36.5	36.0	33.0	35.0	35.5	34.0	33.1	34.6	34.4	33.6
<b>OPEX</b>	<b>22</b>	<b>27</b>	<b>29</b>	<b>37</b>	<b>25</b>	<b>31</b>	<b>32</b>	<b>40</b>	<b>30</b>	<b>35</b>	<b>39</b>	<b>49</b>	<b>116</b>	<b>129</b>	<b>152</b>	<b>164</b>
% of sales	12.2	13.8	14.0	17.0	12.1	13.8	13.1	15.2	11.7	13.1	14.4	16.4	14.3	13.6	14.0	13.1
<b>Operating profit</b>	<b>32</b>	<b>38</b>	<b>45</b>	<b>36</b>	<b>42</b>	<b>43</b>	<b>58</b>	<b>55</b>	<b>55</b>	<b>58</b>	<b>57</b>	<b>52</b>	<b>151</b>	<b>198</b>	<b>222</b>	<b>258</b>
OM%	17.5	19.3	21.3	16.7	20.0	19.2	23.4	20.8	21.3	21.9	21.1	17.6	18.7	20.9	20.4	20.5
<b>Pretax profit</b>	<b>34</b>	<b>41</b>	<b>49</b>	<b>49</b>	<b>40</b>	<b>48</b>	<b>63</b>	<b>69</b>	<b>61</b>	<b>64</b>	<b>64</b>	<b>68</b>	<b>173</b>	<b>220</b>	<b>257</b>	<b>298</b>
Taxes (benefit)	0	6	14	7	(0)	8	10	11	10	10	10	10	27	29	40	41
<b>Net Profit after minorities</b>	<b>34</b>	<b>34</b>	<b>35</b>	<b>42</b>	<b>40</b>	<b>40</b>	<b>53</b>	<b>58</b>	<b>51</b>	<b>53</b>	<b>53</b>	<b>56</b>	<b>145</b>	<b>191</b>	<b>214</b>	<b>245</b>
<b>Wafer shipments (k 8" equiv)</b>	<b>432</b>	<b>459</b>	<b>477</b>	<b>501</b>	<b>454</b>	<b>481</b>	<b>500</b>	<b>516</b>	<b>510</b>	<b>521</b>	<b>549</b>	<b>593</b>	<b>1,869</b>	<b>1,951</b>	<b>2,172</b>	<b>2,466</b>
QoQ (%)	-11	6	4	5	-9	6	4	3	-1	2	5	8				
YoY (%)	10	4	2	3	5	5	5	3	12	8	10	15	5	4	11	14
<b>ASP per wafer (US\$)</b>	<b>414</b>	<b>424</b>	<b>429</b>	<b>424</b>	<b>454</b>	<b>458</b>	<b>481</b>	<b>505</b>	<b>495</b>	<b>500</b>	<b>485</b>	<b>490</b>	<b>423</b>	<b>476</b>	<b>492</b>	<b>500</b>
QoQ (%)	6	2	1	-1	7	1	5	5	-2	1	-3	1				
YoY (%)	1	8	11	9	10	8	12	19	9	9	1	-3	7	12	4	2
<b>Revenue by technology (%)</b>																
<=13nm	34	32	33	35	33	34	33	36	36	35	37	39	34	34	37	42
0.15/0.18um	18	17	19	15	14	18	19	17	19	18	18	17	17	17	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	51	46	45	46	43	45	43	44	47	47	44	41
<b>Capacity (8", thousand)</b>	<b>465</b>	<b>477</b>	<b>498</b>	<b>504</b>	<b>504</b>	<b>513</b>	<b>525</b>	<b>528</b>	<b>534</b>	<b>534</b>	<b>552</b>	<b>620</b>	<b>1,944</b>	<b>2,070</b>	<b>2,240</b>	<b>2,620</b>
seq%	0	3	4	1	0	2	2	1	1	0	3	12	7	6	8	17

Source: Company data, BOCOM Int'l estimates

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## Hua Hong Semiconductor (1347 HK)



### Financial Statements

Income statement (US\$ m)					
Y/E 31 Dec	2016	2017	2018E	2019E	2020E
Revenue	721	808	946	1,089	1,255
COGS	(501)	(541)	(619)	(715)	(833)
<b>Gross profit</b>	<b>220</b>	<b>267</b>	<b>327</b>	<b>374</b>	<b>422</b>
Opex	104	116	129	152	164
OP	116	151	198	222	258
Net interest expense	1	5	4	4	4
Equity Method	7	10	11	13	14
Others	29	7	7	18	22
<b>Pre-tax income</b>	<b>154</b>	<b>173</b>	<b>220</b>	<b>257</b>	<b>298</b>
Tax	(25)	(27)	(29)	(40)	(41)
Net income (before minority interest)	129	145	192	216	256
Minority interest	-	-	0	(2)	(11)
<b>Net income</b>	<b>129</b>	<b>145</b>	<b>191</b>	<b>214</b>	<b>245</b>
EPS (US cents)	12.42	13.91	15.55	16.60	19.03

Cash flow statement (US\$ m)					
Y/E 31 Dec	2016	2017	2018E	2019E	2020E
Net profit	129	145	191	214	245
Depreciation/amortization	88	101	120	154	176
Changes in work capital	(6)	(9)	(11)	(12)	(14)
Forex gain/loss	-	-	-	-	-
Others	1	22	-	-	-
<b>Cash flow from operations</b>	<b>212</b>	<b>258</b>	<b>300</b>	<b>356</b>	<b>407</b>
Capex	(169)	(136)	(250)	(350)	(350)
Sales of tangible assets	-	-	-	-	-
Investments	-	-	-	-	-
Others	(65)	(61)	(775)	(215)	(188)
<b>Cash flow from investing</b>	<b>(233)</b>	<b>(197)</b>	<b>(1,025)</b>	<b>(565)</b>	<b>(538)</b>
Dividends paid	(36)	(40)	(44)	(57)	(64)
New share issued	-	3	400	-	-
Debt issuance/(repayment)	(86)	(2)	400	400	400
Other	(4)	(2)	-	-	-
<b>Cash flow from financing</b>	<b>(125)</b>	<b>(41)</b>	<b>756</b>	<b>343</b>	<b>336</b>
Other	(22)	13	-	-	-
<b>Net cash flow</b>	<b>(169)</b>	<b>34</b>	<b>31</b>	<b>134</b>	<b>206</b>
Cash at beginning	510	341	375	406	540
<b>Cash at end</b>	<b>341</b>	<b>375</b>	<b>406</b>	<b>540</b>	<b>745</b>

Balance sheet (US\$ m)					
As of 31 Dec	2016	2017	2018E	2019E	2020E
Cash & cash equiv.	341	375	406	540	745
Marketable securities	126	194	194	194	194
Account receivables	144	159	187	215	248
Inventory	95	116	135	156	180
Others	9	10	10	10	10
<b>Current assets</b>	<b>715</b>	<b>853</b>	<b>931</b>	<b>1,114</b>	<b>1,376</b>
Land/CIP	20	21	21	21	21
PP&E, net	657	734	864	1,060	1,235
Investment in associates/JV	45	58	802	985	1,136
Investment property	169	180	210	242	279
Intangible asset	8	7	7	7	7
Other fixed assets	213	226	226	226	226
<b>Total assets</b>	<b>1,827</b>	<b>2,078</b>	<b>3,062</b>	<b>3,655</b>	<b>4,280</b>
Accounts payable	176	209	245	281	325
Short-term debt	2	61	61	61	61
Others	60	67	67	67	67
<b>Current liabilities</b>	<b>238</b>	<b>337</b>	<b>372</b>	<b>409</b>	<b>452</b>
Long term debt	91	32	432	832	1,232
Others	9	14	14	14	14
<b>Total liabilities</b>	<b>338</b>	<b>383</b>	<b>819</b>	<b>1,256</b>	<b>1,699</b>
Common stock	1,550	1,555	1,955	1,955	1,955
Reserves	(62)	140	288	445	626
<b>Shareholder equity</b>	<b>1,489</b>	<b>1,695</b>	<b>2,243</b>	<b>2,400</b>	<b>2,581</b>
minority interest	-	-	-	-	-
<b>Total Liabilities &amp; Capital</b>	<b>1,827</b>	<b>2,078</b>	<b>3,062</b>	<b>3,655</b>	<b>4,280</b>

Source: Company data, BOCOM Int'l estimates

Financial ratios					
Y/E 31 Dec	2016	2017	2018E	2019E	2020E
P/E (x)	23.1	20.6	18.4	17.3	15.1
P/B (x)	2.0	1.8	1.6	1.5	1.4
P/S (x)	4.1	3.7	3.7	3.4	2.9
EV/EBITDA (x)	13.4	10.8	11.4	10.8	9.8
Dividend yield (%)	1.2	1.3	1.2	1.5	1.7
Net debt/equity	(0.2)	(0.2)	0.0	0.1	0.2
ROE (%)	8.6	9.1	9.7	9.2	9.9
ROA (%)	6.9	7.4	7.5	6.4	6.5
ROIC (%)	7.9	8.6	8.5	7.2	7.2

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## Hua Hong Semiconductor (1347 HK)



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##### Analyst Stock Ratings:

**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**.

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## Hua Hong Semiconductor (1347 HK)



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