

## Company Report

China Merchants Securities (HK) Co., Ltd.  
Hong Kong Equity Research

### Hua Hong (1347 HK)

#### Another record high quarter, outlook remains favorable

- 3Q21 revenue beat guidance/consensus on both wafer shipment and ASP increases; demand strong across segments
- Management expects fab capacities to stay fully-loaded, ASP to keep rising in next few quarters on solid customer demand
- Positive outlook remains intact; maintain BUY

#### 3Q21 beat; shipment and ASP rose on strong demand

Hua Hong (HH) posted another record quarter for revenue of USD451mn (+30% qoq, beat guidance/consensus) in 3Q21. Wafer shipment grew 24% qoq driven by MCU, PMIC, IGBT, Super Junction, CIS and RF, while wafer ASP rose 5%. GPM grew 2.3ppt qoq to 27.1% (beat consensus) helped by better pricing and capacity utilization, which further increased from 110% in 2Q21 to 111% in 3Q21 as 8" fabs loading extended to 112%. Net profit came in at USD51mn (vs. USD45mn consensus).

#### 4Q21 guidance points to another stellar quarter

For 4Q21, HH expects its revenue to rise 9% qoq to ~USD490mn (10% above consensus), with growth mainly from the Wuxi fab. Wuxi capacity reached 65k wpm by 3Q at full-loading (vs. 48k in May). Guidance points to a GPM improvement in 4Q21 at 27-28% (vs. 26.4% consensus), as rising wafer price offset the increase in depreciation. Management expects wafer ASP to continue to increase in next few quarters, driven by strong demand and mix improvement. HH expects all of its fabs to stay fully utilized on solid customer demand.

#### Wuxi fab capacity expansion ahead of schedule

Hua Hong reached its target to raise Wuxi fab capacity to 65k wpm two months earlier (originally target for end-2021). For next year, management plans to maintain 65k capacity in Wuxi fab for most of the year, meanwhile further expanding capacity to 94.5k wpm by end-2022.

#### Positive outlook intact; maintain BUY

We remain positive on HH, as market demand for HH's technology platforms continue to be strong. We believe HH's fundamentals remain intact, with multiple tailwinds driving revenue growth and margin expansion. We update our estimates, and keep TP at HKD62.0, now based on 3.6x 2022E P/B.

#### Financials

USD mn	2019	2020	2021E	2022E	2023E
Revenue	933	961	1,596	1,995	2,131
yoy	0%	3%	66%	25%	7%
Gross margin	30.3%	24.4%	26.1%	26.3%	27.0%
Net profit	162	99	200	209	263
yoy	-11%	-39%	101%	4%	26%
BPS (USD)	1.74	1.95	2.12	2.24	2.44
P/E (x)	18.1	75.3	38.3	36.8	29.2
P/B (x)	1.3	2.9	2.7	2.6	2.4
ROE	7.4%	4.2%	7.6%	7.4%	8.6%

Sources: Company data, CMS (HK) estimates; share price as of Nov 11, 2021

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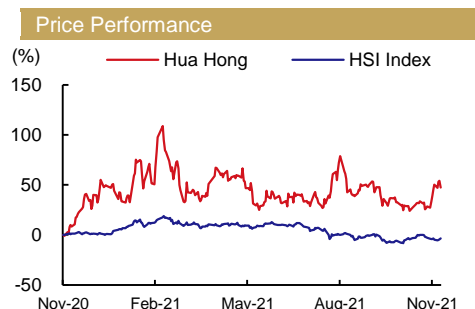
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#### WHAT'S NEW

3Q21 results; estimates change

#### BUY

Previous	BUY
Price (Nov 11, 2021)	HKD44.90
12-month Target Price (Potential up/downside)	HKD62.0 (+38%)
Previous	HKD62.0



Source: Bloomberg, as of Nov 11, 2021

%	1m	6m	12m
Hua Hong	14.2	(3.0)	47.2
HSI	(0.3)	(10.6)	(3.5)

Sector: Hardware Technology	
Hang Seng Index (Nov 11, 2021)	25,248
HSCEI (Nov 11, 2021)	9,048

Key Data	
52-week range (HKD)	29.1 - 64.65
Market cap (HKD mn)	58,391
Avg. daily volume (mn)	7.14
BVPS (HKD)	15.23

Shareholding Structure	
HuaHong Group	27.1%
SAIL	15.1%
National IC Fund	18.8%
No. of shares outstanding (mn)	1,295
Free float	39.0%

Sources: Company data, Bloomberg

#### Related Research

1. Hua Hong (1347 HK) - Stellar results with favorable demand outlook intact (BUY) (Aug 12, 2021)
2. Hua Hong (1347 HK) - Another record quarter; solid demand outlook intact (BUY) (May 13, 2021)
3. Hua Hong (1347 HK) - StarPower concerns overdone; fundamental still intact (BUY) (Mar 3, 2021)
4. Hua Hong (1347 HK) - Another record quarter, strong momentum to continue (BUY) (Feb 10, 2021)

## Hua Hong 3Q21 results highlights

Figure 1: Hua Hong 3Q21 results comparison (actual vs forecast)

(USD mn)	Actual			3Q21 Growth		3Q21 Forecast			
	3Q20	2Q21	3Q21	qoq	yoy	Street	Surprise	CMS	Surprise
<b>Revenue</b>	<b>253</b>	<b>346</b>	<b>451</b>	<b>30%</b>	<b>78%</b>	<b>413</b>	<b>9%</b>	<b>409</b>	<b>10%</b>
Wafers	244	331	431	30%	77%	n.a.	n.a.	393	10%
Others	9	15	20	36%	133%	n.a.	n.a.	16	26%
<b>Gross profit</b>	<b>61</b>	<b>86</b>	<b>122</b>	<b>43%</b>	<b>99%</b>	<b>110</b>	<b>11%</b>	<b>106</b>	<b>15%</b>
Op. profit	(13)	40	50	26%	n.a.	30	65%	25	97%
Pretax income	11	52	57	11%	415%	48	19%	39	48%
<b>Net income</b>	<b>18</b>	<b>44</b>	<b>51</b>	<b>15%</b>	<b>187%</b>	<b>45</b>	<b>13%</b>	<b>52</b>	<b>-3%</b>
FD EPS (USD)	0.013	0.033	0.038	15%	186%	0.035	10%	0.039	-3%
<b>BPS (USD)</b>	<b>1.829</b>	<b>2.028</b>	<b>2.068</b>	<b>2%</b>	<b>13%</b>	<b>2.060</b>	<b>0%</b>	<b>2.068</b>	<b>0%</b>
Gross margin	24.2%	24.8%	27.1%	2.3 ppt	2.9 ppt	26.8%	0.3 ppt	26.0%	1.1 ppt
Op. margin	-5.1%	11.5%	11.1%	-0.4 ppt	16.2 ppt	7.4%	3.7 ppt	6.2%	4.9 ppt
Pretax margin	4.4%	14.9%	12.7%	-2.2 ppt	8.3 ppt	11.7%	1.0 ppt	9.5%	3.2 ppt
Net margin	7.0%	12.7%	11.3%	-1.5 ppt	4.3 ppt	10.9%	0.4 ppt	12.8%	-1.5 ppt
ROE	3.1%	6.8%	7.6%	0.8 ppt	4.6 ppt	7.0%	0.7 ppt	7.8%	-0.2 ppt
Wafer shipments (k)*	577	730	907	24%	57%	n.a.	n.a.	825	10%
Wafer ASP (USD)	424	454	476	5%	12%	n.a.	n.a.	477	0%
Total capacity (kwpm)*	210	268	297	11%	41%	n.a.	n.a.	291	2%
Utilization rate	95.8%	109.5%	110.9%	1.4 ppt	15.1 ppt	n.a.	n.a.	94.7%	16.2 ppt
200mm utilization	102.0%	112.1%	112.3%	0.2 ppt	10.3 ppt	n.a.	n.a.	100.0%	12.3 ppt
300mm utilization	56.4%	104.1%	108.7%	4.6 ppt	52.3 ppt	n.a.	n.a.	86.2%	22.5 ppt

Note: (\*) Shipments and capacity converted into 8" equivalent in k wpm (thousand wafers per month)

Sources: Company data, Bloomberg consensus (as of Nov 10, 2021), CMS (HK) estimates

### ■ Revenue new quarterly high, margin improved

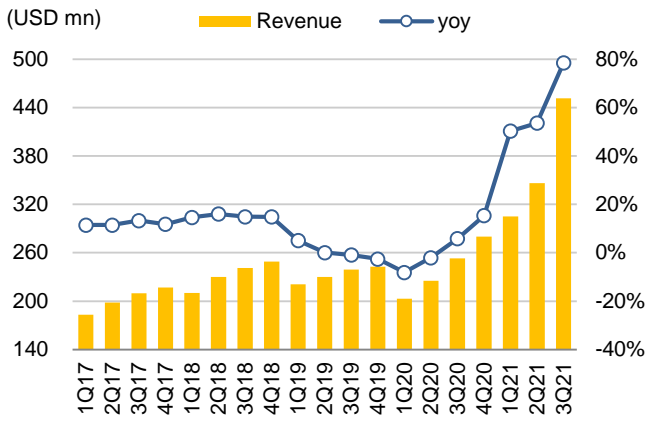
- Revenue grew 30% qoq (+78% yoy) to USD451mn in 3Q21, another quarterly historical high, helped by increase in both wafer shipments (+24% qoq to 907k in 3Q21) and blended ASP (+5% qoq) driven by increased demand for MCU, PMIC, IGBT, Super Junction, CIS, RF, and NOR flash
- Gross margin (GPM) improved by 2.3ppt qoq to 27.1% in 3Q21 (+2.9ppt yoy), mainly driven by improved ASP and capacity utilization rate
- Operating expenses in 3Q21 were 57.5% above 2Q21, mainly due to increased labor expenses and decreased government grants for R&D
- Net profit increased 15% qoq to USD51mn in 3Q21 (net margin 11.3%); annualized ROE in 3Q21 was 7.6%
- Operating cash flow reached USD152n in 3Q21; CAPEX was USD253mn in total (USD28mn and USD225mn for 8" fab and Wuxi fab respectively)

### ■ Performances by fabs

- Hua Hong 8" fabs
  - Revenue +20.2% qoq to USD315mn (+33.2% yoy), reached a record high
  - Gross margin increased 3.6ppt qoq to 35.2%, mainly driven by improved ASP
  - Op expenses were USD42.6mn, 104.5% above 2Q21, primarily due to increased R&D expenses and labor expenses
- Hua Hong Wuxi fab
  - Revenue grew 62.5% qoq to USD136.7mn
  - Gross margin was 8.5% in 3Q21 (vs. 3.3% in 2Q21 and -18.0% in 3Q20)
  - Op expenses were USD29.7mn, 18.5% above 2Q21, mainly due to decreased government grants

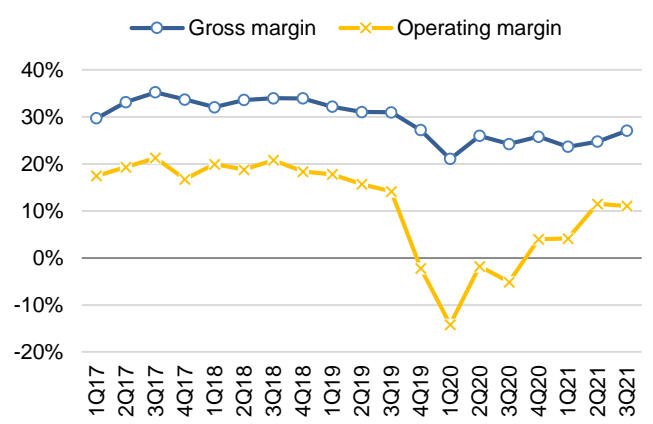
Quarterly financials

Figure 2: Hua Hong quarterly revenue



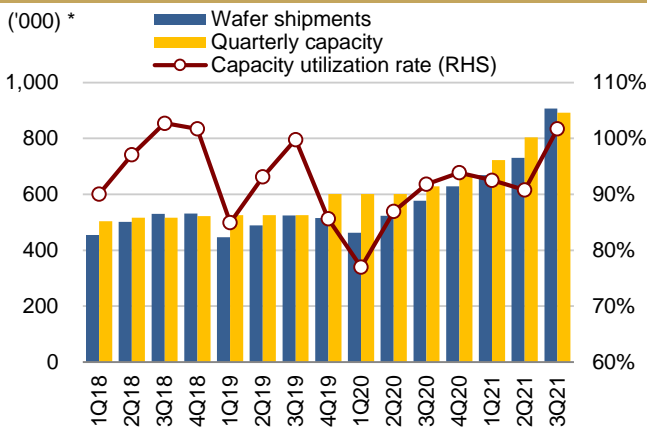
Sources: Company data, CMS (HK)

Figure 3: Hua Hong quarterly margins



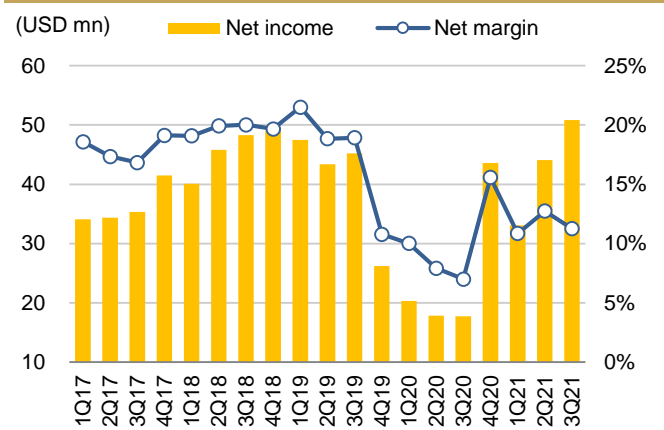
Sources: Company data, CMS (HK)

Figure 4: Hua Hong quarterly shipment and capacity



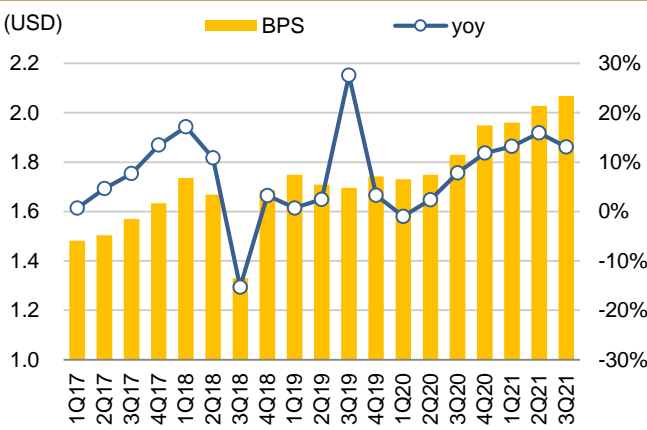
Sources: Company data, CMS (HK); (\*) 8" equivalent wafers

Figure 5: Hua Hong quarterly net income



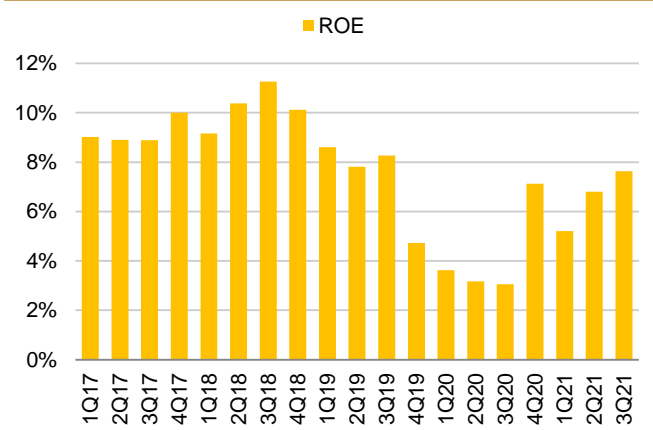
Sources: Company data, CMS (HK)

Figure 6: Hua Hong quarterly BPS



Sources: Company data, CMS (HK)

Figure 7: Hua Hong quarterly ROE (annualized)



Sources: Company data, CMS (HK)

## Forecast update

Figure 8: Hua Hong earnings revision (2021E, 2022E, 2023E)

(USD mn)	2021E				2022E				2023E			
	Old	New	Diff	Δ %	Old	New	Diff	Δ %	Old	New	Diff	Δ %
Revenue	1,489	1,596	107	7%	1,789	1,995	206	12%	2,045	2,131	85	4%
Gross profit	374	417	44	12%	475	524	49	10%	553	576	23	4%
Op profit	98	168	70	71%	145	160	14	10%	181	200	19	10%
Pretax income	144	198	54	37%	189	177	(12)	-6%	238	223	(16)	-7%
Net income	177	200	23	13%	239	209	(30)	-13%	280	263	(17)	-6%
EPS (USD)	0.13	0.15	0.02	13%	0.18	0.16	(0.02)	-13%	0.21	0.20	(0.01)	-6%
Gross margin	25.1%	26.1%	1.1 ppt		26.6%	26.3%	-0.3 ppt		27.0%	27.0%	0.0 ppt	
Op margin	6.6%	10.5%	3.9 ppt		8.1%	8.0%	-0.1 ppt		8.8%	9.4%	0.5 ppt	
Pretax margin	9.7%	12.4%	2.7 ppt		10.6%	8.9%	-1.7 ppt		11.6%	10.4%	-1.2 ppt	
Net margin	11.9%	12.6%	0.6 ppt		13.3%	10.5%	-2.9 ppt		13.7%	12.3%	-1.4 ppt	
BPS (USD)	2.105	2.123	0.019	1%	2.250	2.240	(0.010)	0%	2.465	2.443	(0.023)	-1%
ROE	6.7%	7.6%	0.8 ppt		8.4%	7.4%	-1.1 ppt		9.1%	8.6%	-0.5 ppt	

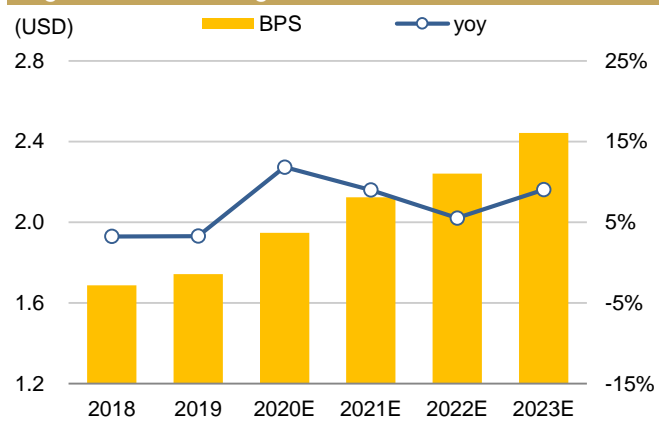
Sources: Company data, CMS (HK) estimates

Figure 9: Hua Hong earnings forecast comparison (CMS vs. consensus)

(USD mn)	2021E	2022E	2023E
<b>Revenue</b>			
<b>CMS</b>	<b>1,596</b>	<b>1,995</b>	<b>2,131</b>
Consensus	1,502	1,955	2,299
<b>Diff (%)</b>	<b>6%</b>	<b>2%</b>	<b>-7%</b>
<b>Gross margin (%)</b>			
<b>CMS</b>	<b>26.1%</b>	<b>26.3%</b>	<b>27.0%</b>
Consensus	25.1%	25.1%	26.4%
<b>Diff</b>	<b>1.0 ppt</b>	<b>1.2 ppt</b>	<b>0.7 ppt</b>
<b>Operating profit</b>			
<b>CMS</b>	<b>168</b>	<b>160</b>	<b>200</b>
Consensus	116	180	257
<b>Diff (%)</b>	<b>45%</b>	<b>-11%</b>	<b>-22%</b>
<b>Net income</b>			
<b>CMS</b>	<b>200</b>	<b>209</b>	<b>263</b>
Consensus	178	206	257
<b>Diff (%)</b>	<b>13%</b>	<b>1%</b>	<b>2%</b>

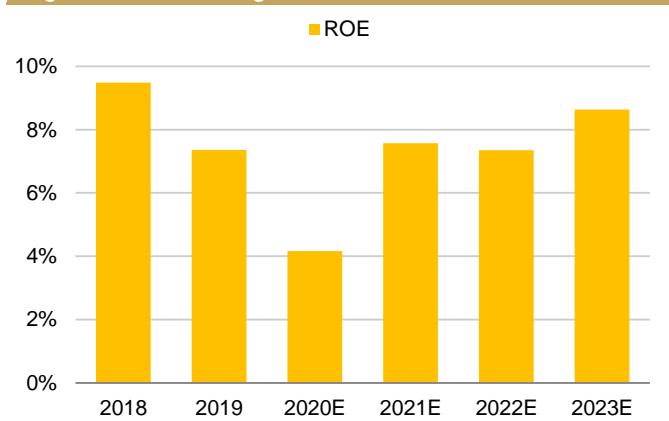
Sources: Bloomberg consensus (as of Nov 10, 2021), CMS (HK) estimates

Figure 10: Hua Hong BPS estimates



Sources: Company data, CMS (HK) estimates

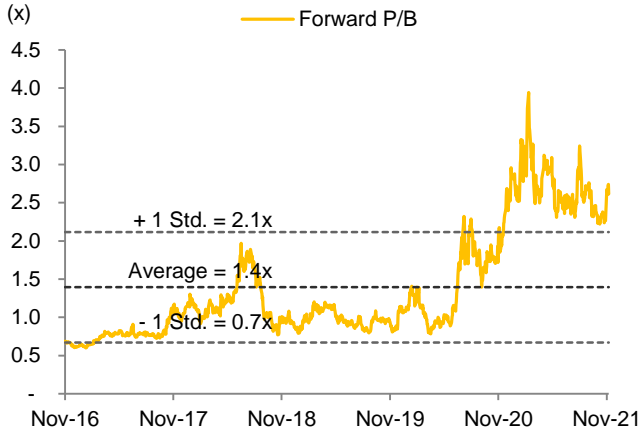
Figure 11: Hua Hong ROE estimates



Sources: Company data, CMS (HK) estimates

Valuation

Figure 12: Hua Hong forward P/B



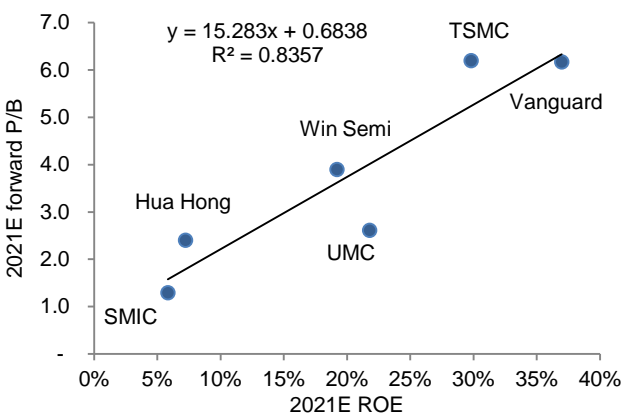
Sources: Bloomberg, CMS (HK) estimates; as of Nov 11, 2021

Figure 13: Hua Hong forward P/B band



Sources: Bloomberg, CMS (HK) estimates; as of Nov 11, 2021

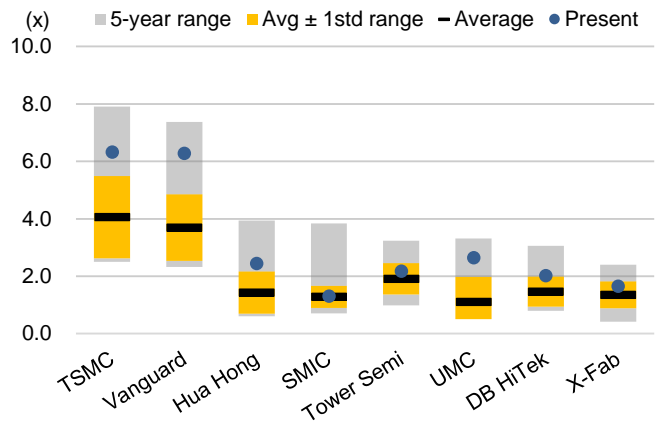
Figure 14: Foundry 2021E forward P/B vs. ROE



Sources: Bloomberg, CMS (HK); as of Nov 11, 2021

Tickers: TSMC (2330 TT), UMC (2303 TT), SMIC (981 HK), Tower Semi (TSEM IT), Hua Hong (1347 HK), Vanguard (5347 TT), X-Fab (XFAB FP), DB HiTek (000990 KS)

Figure 15: Foundry fwd P/B comparison



Sources: Bloomberg, CMS (HK); as of Nov 11, 2021

Figure 16: Valuation comparison

Company	Ticker	Price Crncy	Share Price	Market Cap (USD bn)	P/E (x)		P/B (x)		EV/EBITDA (x)		ROE		Div. yield		Net D/E
					2021E	2022E	2021E	2022E	2021E	2022E	2021E	2022E	2021E	2022E	
<b>Wafer Foundry</b>															
Hua Hong	1347 HK	HKD	44.90	7.5	38.3	36.8	2.7	2.6	15.4	13.3	8%	7%	0.7%	0.8%	-11%
SMIC	0981 HK	HKD	23.50	35.7	17.5	26.9	1.4	1.4	7.8	8.0	9%	5%	0.0%	0.0%	-17%
TSMC	2330 TT	TWD	606.00	564.6	26.6	22.1	7.3	6.2	14.3	11.7	29%	30%	1.8%	2.0%	-23%
UMC	2303 TT	TWD	62.20	27.8	14.2	12.0	2.9	2.6	7.6	6.6	22%	22%	3.7%	5.3%	-11%
CR Micro	688396 CH	CNY	69.68	14.4	41.4	37.2	6.2	5.4	26.4	24.5	16%	15%	0.2%	0.3%	-44%
Vanguard	5347 TT	TWD	153.00	9.0	21.6	17.3	7.1	6.2	13.4	10.6	36%	37%	3.2%	3.8%	-30%
Win Semi	3105 TT	TWD	348.00	5.3	27.8	21.3	4.3	3.9	15.3	12.2	15%	19%	2.6%	3.0%	8%
Tower Semi	TSEM IT	ILs	11,260	3.9	24.5	18.3	2.5	2.1	8.3	7.2	n.a.	n.a.	n.a.	n.a.	-21%
DB HiTek	000990 KS	KRW	59,400	2.2	10.0	7.6	2.6	2.0	5.2	4.5	29%	30%	0.6%	0.7%	-5%
<b>Average</b>					<b>25.0</b>	<b>22.2</b>	<b>4.1</b>	<b>3.6</b>	<b>12.7</b>	<b>11.0</b>	<b>20%</b>	<b>21%</b>	<b>1.5%</b>	<b>1.9%</b>	<b>-17%</b>

Note: Stocks rated by CMS (HK) include: Hua Hong (1347 HK, BUY, TP: HKD62), SMIC (981 HK, NEUTRAL, TP: HKD30);

Sources: Company data, Bloomberg, CMS (HK) estimates; share prices as of Nov 11, 2021

Earnings forecast table

Figure 17: Hua Hong earnings forecast

(USD mn)	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21E	4Q21E	1Q22E	2Q22E	3Q22E	4Q22E	2019	2020	2021E	2022E	2023E
<b>Revenue</b>	<b>203</b>	<b>225</b>	<b>253</b>	<b>280</b>	<b>305</b>	<b>346</b>	<b>451</b>	<b>494</b>	<b>511</b>	<b>493</b>	<b>495</b>	<b>496</b>	<b>933</b>	<b>961</b>	<b>1,596</b>	<b>1,995</b>	<b>2,131</b>
yoy	-8%	-2%	6%	15%	50%	54%	78%	76%	68%	42%	10%	1%	0%	3%	66%	25%	7%
Cost of goods sold	(160)	(167)	(192)	(208)	(233)	(260)	(329)	(357)	(372)	(362)	(367)	(370)	(650)	(726)	(1,179)	(1,471)	(1,555)
<b>Gross profit</b>	<b>43</b>	<b>59</b>	<b>61</b>	<b>72</b>	<b>72</b>	<b>86</b>	<b>122</b>	<b>137</b>	<b>139</b>	<b>131</b>	<b>128</b>	<b>127</b>	<b>282</b>	<b>235</b>	<b>417</b>	<b>524</b>	<b>576</b>
Opex	(71)	(63)	(74)	(61)	(60)	(46)	(72)	(72)	(90)	(90)	(92)	(92)	(179)	(269)	(250)	(364)	(376)
<b>Op. profit</b>	<b>(29)</b>	<b>(4)</b>	<b>(13)</b>	<b>11</b>	<b>13</b>	<b>40</b>	<b>50</b>	<b>65</b>	<b>49</b>	<b>41</b>	<b>36</b>	<b>34</b>	<b>104</b>	<b>(35)</b>	<b>168</b>	<b>160</b>	<b>200</b>
Non-operating items	20	12	24	24	7	12	7	4	4	4	4	4	78	81	30	17	23
<b>Pretax Income</b>	<b>(9)</b>	<b>8</b>	<b>11</b>	<b>36</b>	<b>20</b>	<b>52</b>	<b>57</b>	<b>69</b>	<b>53</b>	<b>45</b>	<b>40</b>	<b>38</b>	<b>182</b>	<b>46</b>	<b>198</b>	<b>177</b>	<b>223</b>
Tax expense	11	(7)	(10)	(7)	1	(14)	(22)	(12)	(9)	(7)	(6)	(6)	(27)	(13)	(47)	(28)	(36)
Minority interest	18	17	17	15	12	7	15	15	15	15	15	15	7	66	49	60	76
<b>Net income (after minority)</b>	<b>20</b>	<b>18</b>	<b>18</b>	<b>44</b>	<b>33</b>	<b>44</b>	<b>51</b>	<b>72</b>	<b>60</b>	<b>53</b>	<b>48</b>	<b>47</b>	<b>162</b>	<b>99</b>	<b>200</b>	<b>209</b>	<b>263</b>
<b>Diluted EPS (USD)</b>	<b>0.016</b>	<b>0.014</b>	<b>0.013</b>	<b>0.033</b>	<b>0.025</b>	<b>0.033</b>	<b>0.038</b>	<b>0.055</b>	<b>0.045</b>	<b>0.040</b>	<b>0.037</b>	<b>0.036</b>	<b>0.125</b>	<b>0.075</b>	<b>0.151</b>	<b>0.157</b>	<b>0.198</b>
yoy	-57%	-59%	-62%	64%	60%	143%	186%	65%	81%	20%	-5%	-35%	-26%	-40%	101%	4%	26%
<b>Book value per share (USD)</b>	<b>1.73</b>	<b>1.75</b>	<b>1.83</b>	<b>1.95</b>	<b>1.96</b>	<b>2.03</b>	<b>2.07</b>	<b>2.12</b>	<b>2.17</b>	<b>2.17</b>	<b>2.20</b>	<b>2.24</b>	<b>1.74</b>	<b>1.95</b>	<b>2.12</b>	<b>2.24</b>	<b>2.44</b>
<b>ROE</b>	<b>3.6%</b>	<b>3.2%</b>	<b>3.1%</b>	<b>7.1%</b>	<b>5.2%</b>	<b>6.8%</b>	<b>7.6%</b>	<b>10.6%</b>	<b>8.6%</b>	<b>7.5%</b>	<b>6.8%</b>	<b>6.5%</b>	<b>7.4%</b>	<b>4.2%</b>	<b>7.6%</b>	<b>7.4%</b>	<b>8.6%</b>
<b>Margins</b>																	
<b>Gross margin</b>	<b>21.1%</b>	<b>26.0%</b>	<b>24.2%</b>	<b>25.8%</b>	<b>23.7%</b>	<b>24.8%</b>	<b>27.1%</b>	<b>27.8%</b>	<b>27.2%</b>	<b>26.5%</b>	<b>25.8%</b>	<b>25.5%</b>	<b>30.3%</b>	<b>24.4%</b>	<b>26.1%</b>	<b>26.3%</b>	<b>27.0%</b>
<b>Op. margin</b>	<b>-14.2%</b>	<b>-1.8%</b>	<b>-5.1%</b>	<b>4.0%</b>	<b>4.2%</b>	<b>11.5%</b>	<b>11.1%</b>	<b>13.2%</b>	<b>9.6%</b>	<b>8.3%</b>	<b>7.2%</b>	<b>6.9%</b>	<b>11.1%</b>	<b>-3.6%</b>	<b>10.5%</b>	<b>8.0%</b>	<b>9.4%</b>
Opex ratio	35.2%	27.7%	29.3%	21.8%	19.5%	13.3%	16.0%	14.6%	17.6%	18.2%	18.6%	18.6%	19.2%	28.0%	15.7%	18.2%	17.7%
<b>Pretax margin</b>	<b>-4.3%</b>	<b>3.5%</b>	<b>4.4%</b>	<b>12.7%</b>	<b>6.5%</b>	<b>14.9%</b>	<b>12.7%</b>	<b>14.0%</b>	<b>10.5%</b>	<b>9.2%</b>	<b>8.1%</b>	<b>7.7%</b>	<b>19.5%</b>	<b>4.8%</b>	<b>12.4%</b>	<b>8.9%</b>	<b>10.4%</b>
<b>Net margin</b>	<b>10.0%</b>	<b>7.9%</b>	<b>7.0%</b>	<b>15.6%</b>	<b>10.8%</b>	<b>12.7%</b>	<b>11.3%</b>	<b>14.7%</b>	<b>11.7%</b>	<b>10.7%</b>	<b>9.8%</b>	<b>9.5%</b>	<b>17.4%</b>	<b>10.3%</b>	<b>12.6%</b>	<b>10.5%</b>	<b>12.3%</b>
<b>Revenues by service type</b>																	
Wafer	96.5%	96.0%	96.6%	96.5%	95.7%	95.7%	95.6%	97.2%	96.8%	96.3%	94.9%	96.5%	97%	96%	96%	96%	96%
Others	3.5%	4.0%	3.4%	3.5%	4.3%	4.3%	4.4%	2.8%	3.2%	3.7%	5.1%	3.5%	3%	4%	4%	4%	4%
<b>Wafer revenue</b>																	
<b>Wafer revenue</b>	<b>196</b>	<b>216</b>	<b>244</b>	<b>270</b>	<b>292</b>	<b>331</b>	<b>431</b>	<b>480</b>	<b>494</b>	<b>475</b>	<b>470</b>	<b>479</b>	<b>907</b>	<b>927</b>	<b>1,535</b>	<b>1,918</b>	<b>2,040</b>
Seq	-16%	10%	13%	11%	8%	14%	30%	11%	3%	-4%	-1%	2%	-1%	2%	66%	25%	6%
Shipment ('000 units)	463	523	577	628	669	730	907	980	989	950	950	978	1,974	2,191	3,286	3,867	4,002
Seq	-10%	13%	10%	9%	7%	9%	24%	8%	1%	-4%	0%	3%	-2%	11%	50%	18%	3%
ASP (USD)	423	414	424	430	436	454	476	490	500	500	495	490	459	423	467	496	510
Seq	-7%	-2%	2%	2%	1%	4%	5%	3%	2%	0%	-1%	-1%	2%	-8%	10%	6%	3%
<b>Capacity</b>																	
<b>Total capacity (k wpm)</b>	<b>201</b>	<b>201</b>	<b>210</b>	<b>223</b>	<b>241</b>	<b>268</b>	<b>297</b>	<b>324</b>	<b>324</b>	<b>324</b>	<b>336</b>	<b>392</b>	<b>182</b>	<b>209</b>	<b>283</b>	<b>344</b>	<b>361</b>
Seq	0%	0%	4%	6%	8%	11%	11%	9%	0%	0%	3%	17%	6%	15%	35%	22%	5%
<b>Utilization rate</b>	<b>82.4%</b>	<b>93.4%</b>	<b>95.8%</b>	<b>99.0%</b>	<b>104.2%</b>	<b>109.5%</b>	<b>110.9%</b>	<b>100.7%</b>	<b>101.7%</b>	<b>97.6%</b>	<b>94.4%</b>	<b>83.2%</b>	<b>90.6%</b>	<b>87.5%</b>	<b>96.9%</b>	<b>93.7%</b>	<b>92.4%</b>
200mm utilization	91.9%	100.4%	102.0%	104.4%	104.3%	112.1%	112.3%	105.0%	102.0%	100.0%	100.0%	100.0%	92.4%	99.7%	108.4%	100.5%	97.8%
300mm utilization	6.9%	38.3%	56.4%	75.5%	103.8%	104.1%	108.7%	95.5%	101.4%	94.8%	88.0%	69.3%	9.6%	17.0%	77.2%	86.4%	87.3%

Sources: Company data, CMS (HK) estimates; capacity are converted into 8" equivalent wafers

## Financial Summary

### Balance Sheet

USD mn	2019	2020	2021E	2022E	2023E
<b>Current assets</b>	<b>1,497</b>	<b>1,406</b>	<b>1,746</b>	<b>1,443</b>	<b>1,522</b>
Cash & equivalents	476	923	1,045	692	848
S/T investments	520	0	0	0	0
Accounts receivable	165	121	211	226	218
Inventories	142	226	387	419	348
Other receivables	113	131	69	60	59
Other current assets	80	5	34	46	49
<b>Non-current assets</b>	<b>2,117</b>	<b>3,162</b>	<b>4,486</b>	<b>5,009</b>	<b>5,161</b>
PP&E – net	1,558	2,510	3,821	4,341	4,491
Right-of-use assets	75	79	75	75	75
Intangible assets	13	37	36	35	35
Investment in associates	73	105	110	112	112
L/T financial assets	208	230	235	238	239
Other non-current assets	190	200	208	208	208
<b>Total assets</b>	<b>3,613</b>	<b>4,569</b>	<b>6,232</b>	<b>6,452</b>	<b>6,683</b>
<b>Current liabilities</b>	<b>475</b>	<b>665</b>	<b>1,185</b>	<b>1,252</b>	<b>1,220</b>
S/T debts	4	48	181	181	181
Accounts payable	86	131	192	251	217
Other payables & accruals	304	386	684	684	684
Other current liabilities	81	100	128	136	137
<b>Non-current liabilities</b>	<b>55</b>	<b>549</b>	<b>1,489</b>	<b>1,489</b>	<b>1,490</b>
L/T debts	22	518	1,459	1,459	1,459
Other L/T liabilities	34	31	30	30	31
<b>Total liabilities</b>	<b>531</b>	<b>1,214</b>	<b>2,674</b>	<b>2,741</b>	<b>2,709</b>
Share capital	1,966	1,979	1,985	1,985	1,985
Reserves	279	549	777	929	1,192
Non-controlling interests	837	826	797	797	797
Capital adjusted	0	0	0	0	0
<b>Total equity and liabilities</b>	<b>3,613</b>	<b>4,569</b>	<b>6,232</b>	<b>6,452</b>	<b>6,683</b>

### Cashflow Statement

USD mn	2019	2020	2021E	2022E	2023E
<b>CF from operating activities</b>	<b>163</b>	<b>269</b>	<b>513</b>	<b>588</b>	<b>728</b>
Pretax income	182	46	198	177	223
Depreciation & amortization	129	206	326	430	499
Changes of W/C	6	4	(190)	13	45
Tax paid	(27)	(13)	(47)	(28)	(36)
Others	(127)	25	225	(4)	(3)
<b>CF from investing activities</b>	<b>(723)</b>	<b>(406)</b>	<b>(1,431)</b>	<b>(941)</b>	<b>(638)</b>
Capital expenditure	(922)	(1,087)	(1,440)	(950)	(650)
Other investments	200	682	9	9	12
<b>CF from financing activities</b>	<b>263</b>	<b>540</b>	<b>1,037</b>	<b>(0)</b>	<b>66</b>
Dividends paid	(51)	0	0	(56)	(58)
Shares issued (cancelled)	3	8	7	0	0
Debt issued (repaid)	(4)	539	1,074	0	0
Others	316	(7)	(44)	56	124
<b>Net cash flow</b>	<b>(301)</b>	<b>447</b>	<b>122</b>	<b>(353)</b>	<b>157</b>

### Profit & Loss Statement

USD mn	2019	2020	2021E	2022E	2023E
<b>Revenue</b>	<b>933</b>	<b>961</b>	<b>1,596</b>	<b>1,995</b>	<b>2,131</b>
Cost of sales	(650)	(726)	(1,179)	(1,471)	(1,555)
<b>Gross profit</b>	<b>282</b>	<b>235</b>	<b>417</b>	<b>524</b>	<b>576</b>
S&M expenses	(9)	(8)	(10)	(16)	(17)
G&A expenses	(170)	(261)	(239)	(348)	(359)
<b>Op. profit</b>	<b>104</b>	<b>(35)</b>	<b>168</b>	<b>160</b>	<b>200</b>
Interest income	19	11	13	13	13
Interest expense	(1)	(3)	(11)	(12)	(12)
Other non-op items	60	73	29	16	22
<b>Pretax income</b>	<b>182</b>	<b>46</b>	<b>198</b>	<b>177</b>	<b>223</b>
Tax expense	(27)	(13)	(47)	(28)	(36)
Net income (bef Min)	155	33	151	149	187
Minority interests	7	66	49	60	76
Net income (aft Min)	162	99	200	209	263
<b>FD EPS (USD)</b>	<b>0.13</b>	<b>0.08</b>	<b>0.15</b>	<b>0.16</b>	<b>0.20</b>

### Financial Ratios

	2019	2020	2021E	2022E	2023E
<b>yoy growth rate</b>					
Revenue	0.2%	3.1%	66.1%	25.0%	6.8%
Op. profit	-42.7%	n.a.	n.a.	-4.6%	24.9%
Net income	-11.4%	-38.7%	101.5%	4.1%	26.1%
<b>Profitability</b>					
Gross margin	30.3%	24.4%	26.1%	26.3%	27.0%
Op. margin	11.1%	-3.6%	10.5%	8.0%	9.4%
Net margin.	17.4%	10.3%	12.6%	10.5%	12.3%
ROE	7.4%	4.2%	7.6%	7.4%	8.6%
<b>Liquidity</b>					
Debt to equity	0.8%	16.9%	46.1%	44.2%	41.3%
Net debt to equity	-14.6%	-10.6%	16.7%	25.6%	19.9%
Current ratio	3.1	2.1	1.5	1.2	1.2
Quick ratio	2.8	1.8	1.1	0.8	1.0
<b>Operating efficiency</b>					
Asset turnover	0.3	0.2	0.3	0.3	0.3
Inventory turnover	0.2	0.3	0.3	0.3	0.2
AR turnover	0.2	0.1	0.1	0.1	0.1
AP turnover	0.1	0.1	0.1	0.2	0.1
<b>Per share ratios (USD)</b>					
EPS	0.13	0.08	0.15	0.16	0.20
BPS	1.74	1.95	2.12	2.24	2.44
Net cash PS	0.35	0.27	(0.45)	(0.72)	(0.60)
FCF PS	(0.59)	(0.62)	(0.70)	(0.27)	0.06
EBITDA PS	0.24	0.19	0.40	0.47	0.55
<b>Valuation ratios</b>					
P/E	18.1	75.3	38.3	36.8	29.2
P/B	1.3	2.9	2.7	2.6	2.4
EV/EBITDA	10.6	30.6	15.4	13.3	11.2

Sources: Company data, CMS (HK) estimates; price as of Nov 11, 2021

## Investment Ratings

Industry Rating	Definition
OVERWEIGHT	Expect sector to outperform the market over the next 12 months
NEUTRAL	Expect sector to perform in-line with the market over the next 12 months
UNDERWEIGHT	Expect sector to underperform the market over the next 12 months

Company Rating	Definition
BUY	Expect stock to generate 10%+ return over the next 12 months
NEUTRAL	Expect stock to generate +10% to -10% over the next 12 months
SELL	Expect stock to generate loss of 10%+ over the next 12 months

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