

May 12, 2022 01:38 PM GMT

## Hon Hai Precision | Asia Pacific

Stronger 2022 Outlook  
Guidance the Positive Surprise

Stock Rating  
Overweight

Industry View  
In-Line

Price Target  
NT\$145.00

Hon Hai proves its execution expertise by strong beat in 1Q earnings and further share gain at computing and server offerings amid macro volatilities in 2022. EV manufacturing continues to move forward as long-term driver. Stay OW.

**1Q22 a clean beat:** Gross margin increased 0.2ppt YoY (flat QoQ), to 6%, and operating margin rose 0.6ppt YoY (-0.2ppt QoQ), to 2.6%, driven by better product mix and favorable FX. With impressive opex control, at 3.4% of total revenue (vs. 3.8-4% historically), operating profit was 26% and 19% ahead of our and consensus estimates. Net profit of NT\$29.5bn (-34% QoQ, +5% YoY), or EPS of NT\$2.12, was 11% and 4% above our and Street expectations.

**2Q22 flat QoQ/YoY revenue growth proves solid execution:** Management guides 2Q revenue to stay flat QoQ and YoY, though smartphone segment will decline 5-1% QoQ for model transition. Cloud and networking products will likely show >10% QoQ and YoY growth, driven by demand strength and ongoing share gains in CSP server customers. Supply chain disruption in China remains a key to monitor, but the impact should be manageable for Hon Hai, thanks to its diversified production bases across China and the globe. Gross margin aims to grow slightly QoQ, on product mix and FX benefits.

**Stronger 2022 outlook, led by share gain at computing segment:** Management retains its 2022 revenue guidance of flat to up/down 5% YoY, but indicates the outlook for all product lines turns better than a month ago. Among all, the computing segment outshines, at up 5-10% YoY vs. prior guidance of flat YoY in March. This reflects the share gain benefits in desktop PC and MacBook projects from its solid supply chain management and execution. Gross margin is indicated to expand YoY with improved opex efficiency this year, implying profit should outgrow revenue in 2022.

**EV manufacturing kicks off in 2022 - earlier than expected:** Hon Hai aims to roll out production of Endurance, Lordstown's electric light-duty trucks, in the newly acquired fab in 3Q22. The e-bus project that started production in March this year should be able to reach 100 unit delivery in Taiwan this year. Upcoming pipeline are: 1) Model C, the passenger EV model, is targeted to reach 5,000-10,000 unit production scale in 2023; 2) the partnership with PTT in Thailand aims for 2024 EV production kick-off; and 3) Fisker PEAR project targets to start production in 2024. Hon Hai aims for 5% supply share by 2025, with EV revenue of US\$30bn, which implies 500-700K shipment in 2025.

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Hon Hai Precision ( 2317.TW, 2317 TT ) **Top Pick**

Greater China Technology Hardware / Taiwan

Stock Rating	Overweight
Industry View	In-Line
Price target	NT\$145.00
Up/downside to price target (%)	42
Shr price, close (May 12, 2022)	NT\$102.00
52-Week Range	NT\$120.00-96.50
Sh out, dil, curr (mn)	13,863
Mkt cap, curr (mn)	NT\$1,414,025
EV, curr (mn)	NT\$1,188,377
Avg daily trading value (mn)	NT\$3,111

Fiscal Year Ending	12/21	12/22e	12/23e	12/24e
ModelWare EPS (NT\$)	10.05	10.50	11.80	12.36
Prior ModelWare EPS (NT\$)	-	10.50	11.80	-
EPS (NT\$)§	9.95	10.57	11.80	12.43
Revenue, net (NT\$ bn)	5,994.2	6,168.8	6,532.4	6,883.0
EBITDA (NT\$ bn)	224.4	235.6	257.0	287.1
ModelWare net inc (NT\$ bn)	139.3	145.5	163.6	171.3
P/E	10.3	9.7	8.6	8.3
P/BV	0.9	0.9	0.8	0.8
RNOA (%)	12.8	10.1	10.8	11.9
ROE (%)	9.5	9.2	10.0	10.0
EV/EBITDA	5.4	4.9	4.4	3.8
Div yld (%)	5.0	5.9	6.7	7.0

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework

§ = Consensus data is provided by Refinitiv Estimates  
e = Morgan Stanley Research estimates

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## Results Summary Table

Exhibit 1: 1Q22 results summary

NT\$ mn	1Q22 Results						
	Actual	QoQ	YoY	MS Est.	Diff.	Consensus	Diff.
<b>Net Sales</b>	<b>1,407,553</b>	<b>-26%</b>	<b>4%</b>	<b>1,377,193</b>	<b>2%</b>	<b>1,371,025</b>	<b>3%</b>
COGS	(1,322,787)	-26%	4%	(1,296,373)	2%	(1,288,763)	3%
<b>Gross Profit</b>	<b>84,766</b>	<b>-26%</b>	<b>8%</b>	<b>80,821</b>	<b>5%</b>	<b>82,261</b>	<b>3%</b>
Operating Expense	(48,096)	-21%	-5%	(51,657)	-7%	(51,356)	-6%
<b>Operating Income</b>	<b>36,669</b>	<b>-30%</b>	<b>33%</b>	<b>29,163</b>	<b>26%</b>	<b>30,905</b>	<b>19%</b>
Total Non-operating Income	258	-97%	-98%	8,280	-97%	9,037	-97%
Pre-tax Income	36,927	-41%	-6%	37,444	-1%	39,942	-8%
Income Tax	(7,318)			(7,844)		(11,645)	
<b>Net Income</b>	<b>29,450</b>	<b>-34%</b>	<b>5%</b>	<b>26,557</b>	<b>11%</b>	<b>28,297</b>	<b>4%</b>
<b>EPS (NT\$)</b>	<b>2.12</b>	<b>-34%</b>	<b>5%</b>	<b>1.92</b>	<b>11%</b>	<b>2.04</b>	<b>4%</b>
<b>Margin (%)</b>		<i>ppt</i>	<i>ppt</i>		<i>ppt</i>		<i>ppt</i>
GM (%)	<b>6.0%</b>	0.0	0.2	<b>5.9%</b>	0.2	<b>6.0%</b>	0.0
OPM (%)	<b>2.6%</b>	-0.2	0.6	<b>2.1%</b>	0.5	<b>2.3%</b>	0.4
Pretax Margin (%)	<b>2.6%</b>	-0.7	-0.3	<b>2.7%</b>	-0.1	<b>2.9%</b>	-0.3
Net Margin (%)	<b>2.1%</b>	-0.3	0.0	<b>1.9%</b>	0.2	<b>2.1%</b>	0.0

Source: Company data, Bloomberg, Morgan Stanley Research estimates.

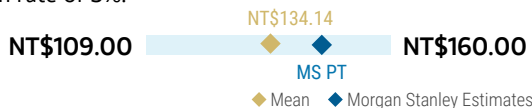
**Risk Reward – Hon Hai Precision (2317.TW)** Top Pick

Key beneficiary of increasing EV shipments; undemanding valuation

**PRICE TARGET NT\$145.00**

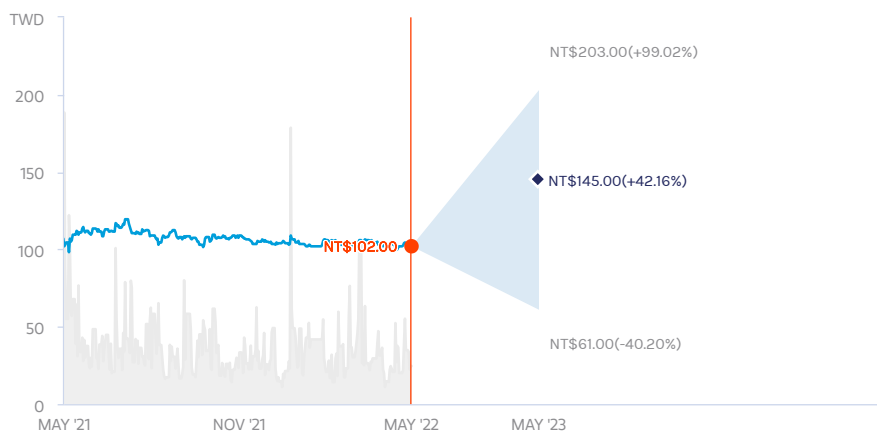
Our price target of NT\$145 is our base case scenario value, derived from a residual income valuation model. Our key assumptions include a cost of equity of 8.5%, a medium-term growth rate of 9%, and a terminal growth rate of 3%.

**Consensus Price Target Distribution**



Source: Refinitiv, Morgan Stanley Research

**RISK REWARD CHART**



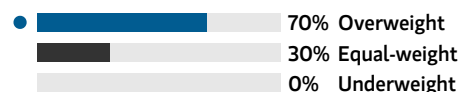
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Refinitiv, Morgan Stanley Research

**OVERWEIGHT THESIS**

- Hon Hai has improved its operational efficiency by automation and supply-chain management, increasing margins.
- Revenue growth is driven by enterprise products, given increasing cloud computing demand, while smartphone revenue and market share should remain steady, at least in the next two to three years.
- Hon Hai's Foxconn 3.0 digital transformation plan aims to seize business opportunities in EV production, followed by digital health and robotics. We expect Hon Hai to ride the trend of increasing EV penetration by leveraging its hardware tech manufacturing expertise, driving significant sales and profit contribution over the long term.
- Valuation remains attractive.

**Consensus Rating Distribution**



● MS Rating

Source: Refinitiv, Morgan Stanley Research

**Risk Reward Themes**

Self-help: *Positive*

View descriptions of Risk Rewards Themes [here](#)

<p><b>BULL CASE</b> <span style="float: right;"><b>NT\$203.00</b></span></p> <p>19x 2022e base case P/E</p> <p><b>Stronger-than-expected iPhone shipments, operating margin expansion, faster new business revenue contribution:</b> We assume earnings benefit from economies of scale and faster progress in automotive production, greater sales contribution from the non-Apple businesses in 2022, faster-than-expected new business take-off, and better-than-expected consumer product shipments.</p>	<p><b>BASE CASE</b> <span style="float: right;"><b>NT\$145.00</b></span></p> <p>13x 2022e base case P/E</p> <p><b>Margin improves via greater operating efficiency, increasing enterprise revenue, stable iPhone market share, and smooth EV business progress:</b> We expect earnings improvement driven by disciplined cost management, along with enterprise segment growth, while smartphone assembly share remains stable. Contribution from new business (EV, 4K+5G, digital healthcare, robotics) is minimal in the near term, but EV business progresses smoothly.</p>	<p><b>BEAR CASE</b> <span style="float: right;"><b>NT\$61.00</b></span></p> <p>6x 2021e base case P/E</p> <p><b>Weaker-than-expected iPhone shipments, operating margin erosion:</b> We assume lower smartphone shipments and an ASP shortfall with margin erosion from lack of scale. We assume a decreasing earnings contribution from Hon Hai's other non-Apple businesses. Development of new business (EV, 4K+5G, digital healthcare, robotics) hampers profitability and no meaningful progress is made.</p>
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## Risk Reward – Hon Hai Precision (2317.TW)

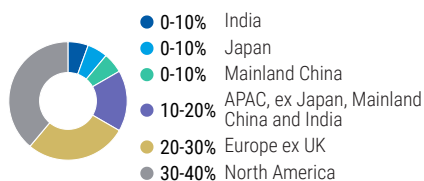
### KEY EARNINGS INPUTS

Drivers	2021	2022e	2023e	2024e
Consumer margin (%)	5.4	5.6	5.6	5.9
Server & networking margin (%)	8.6	8.6	8.8	8.9

### INVESTMENT DRIVERS

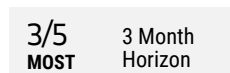
- iPhone sell-through
- Rising automation processes - key to controlling headcount, driving operating margin
- Server/networking businesses and other new business (EVs, robots/automation)
- Transformation to industrial IoT leader from a pure ODM supplier

### GLOBAL REVENUE EXPOSURE



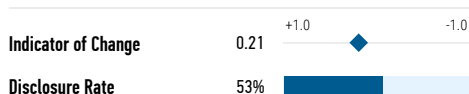
Source: Morgan Stanley Research Estimate  
View explanation of regional hierarchies [here](#)

### MS ALPHA MODELS



Source: Refinitiv, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

### SUSTAINABILITY & ESG



### RISKS TO PT/RATING

#### RISKS TO UPSIDE

- Better-than-expected iPhone sell-through
- Faster EV business development progress
- Higher-than-expected cash dividend payout
- Any new M&A activity that could improve sentiment

#### RISKS TO DOWNSIDE

- Lower iPhone sell-through
- Slower EV business development progress
- Lower cash dividend payout
- Geopolitical developments that could negatively affect foreign investment

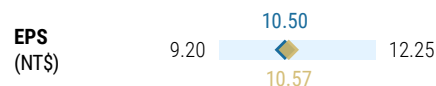
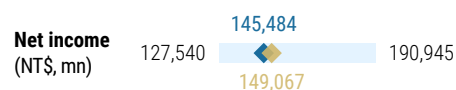
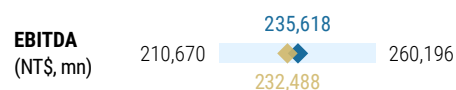
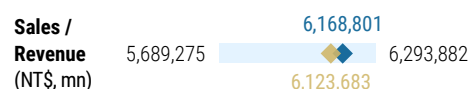
### OWNERSHIP POSITIONING



Source: Refinitiv, Morgan Stanley Research

### MS ESTIMATES VS. CONSENSUS

FY Dec 2022e



◆ Mean     ◆ Morgan Stanley Estimates

Source: Refinitiv, Morgan Stanley Research

## Earnings Estimate Revisions

We keep our 2022 and 2023 EPS estimates largely unchanged. We also introduce our 2024 EPS estimate of NT\$12.36.

**Exhibit 2: Earnings Estimate Changes**

NT\$m	2022E			2023E			2024E
	New	Old	Diff.	New	Old	Diff.	New
<b>Net Sales</b>	<b>6,168,801</b>	<b>6,182,644</b>	<b>0%</b>	<b>6,532,448</b>	<b>6,610,797</b>	<b>-1%</b>	<b>6,883,024</b>
COGS	(5,785,575)	(5,797,735)	0%	(6,110,861)	(6,184,992)	-1%	(6,422,162)
<b>Gross Profit</b>	<b>383,226</b>	<b>384,909</b>	<b>0%</b>	<b>421,588</b>	<b>425,805</b>	<b>-1%</b>	<b>460,863</b>
Operating Exp.	(212,731)	(219,875)	-3%	(233,381)	(234,514)	0%	(246,534)
<b>Operating income</b>	<b>170,495</b>	<b>165,035</b>	<b>3%</b>	<b>188,207</b>	<b>191,292</b>	<b>-2%</b>	<b>214,329</b>
Total non-operating Inc.	27,129	36,121	-25%	34,828	36,121	-4%	19,828
Pre-tax Income	197,624	201,156	-2%	223,035	227,413	-2%	234,157
Income Tax	(39,591)	(40,217)	-2%	(45,617)	(46,831)	-3%	(47,936)
<b>Net Income</b>	<b>145,484</b>	<b>145,504</b>	<b>0%</b>	<b>163,612</b>	<b>163,604</b>	<b>0%</b>	<b>171,311</b>
<b>EPS (NT\$)</b>	<b>10.50</b>	<b>10.50</b>	<b>0%</b>	<b>11.80</b>	<b>11.80</b>	<b>0%</b>	<b>12.36</b>
<b>Margin (%)</b>			<b>ppt</b>			<b>ppt</b>	
GM (%)	6.2%	6.2%	0.0	6.5%	6.4%	0.0	6.7%
OPM (%)	2.8%	2.7%	0.1	2.9%	2.9%	0.0	3.1%
Pretax Margin (%)	3.2%	3.3%	0.0	3.4%	3.4%	0.0	3.4%
Net Margin (%)	2.4%	2.4%	0.0	2.5%	2.5%	0.0	2.5%

Source: Morgan Stanley Research (E) estimates.

# Financial Summary

## Exhibit 3: Financial summary

Consolidated Income Statement					Consolidated Cash Flow Statement				
NT\$m (Year End Dec)	2021	2022E	2023E	2024E	NT\$m (Year End Dec)	2021	2022E	2023E	2024E
<b>Net sales</b>	<b>5,994,174</b>	<b>6,168,801</b>	<b>6,532,448</b>	<b>6,883,024</b>	<b>Cashflow from operations</b>	<b>-88,212</b>	<b>185,137</b>	<b>179,777</b>	<b>193,133</b>
COGS	-5,632,047	-5,785,575	-6,110,861	-6,422,162	Net Profits	139,320	145,484	163,612	171,311
<b>Gross profit</b>	<b>362,127</b>	<b>383,226</b>	<b>421,588</b>	<b>460,863</b>	Depreciation & Amortization	75,481	65,123	68,803	72,733
Operating expenses	-213,168	-212,731	-233,381	-246,534	Equity investment losses (income)	-18,405	0	0	0
<b>Operating income</b>	<b>148,959</b>	<b>170,495</b>	<b>188,207</b>	<b>214,329</b>	Disposal of Investment	-2,531	0	0	0
Non-operating income	44,612	27,129	34,828	19,828	Working Capital Change	-298,180	-22,816	-47,112	-45,583
Interest income	11,953	11,828	11,828	11,828	Other adjustments	-8,908	-2,654	-5,526	-5,328
Investment income	28,660	4,000	7,000	4,000	<b>Cashflow from Investing</b>	<b>-92,083</b>	<b>-82,647</b>	<b>-87,519</b>	<b>-92,216</b>
Disposal of fixed asset	2,939	0	0	0	(Purchases) Sale of fixed asset / (capex)	-92,296	-94,985	-100,584	-105,982
Exchange gain	-5,075	-500	0	0	(Purchases) Sale of LT investment	-24,619	0	0	0
Other	4,732	11,801	16,000	4,000	(Purchases) Sale of ST investment	-15,776	0	0	0
<b>Pre-tax income</b>	<b>193,572</b>	<b>197,624</b>	<b>223,035</b>	<b>234,157</b>	Other adjustments	32,839	0	0	0
Income tax	-39,749	-39,591	-45,617	-47,936	<b>Cashflow from financing</b>	<b>24,281</b>	<b>-71,570</b>	<b>-58,381</b>	<b>-69,861</b>
Minorities	-14,503	-12,550	-13,805	-14,909	Increase in L-T debt	6,619	0	0	0
<b>Modelware Net Income</b>	<b>139,320</b>	<b>145,484</b>	<b>163,612</b>	<b>171,311</b>	Increase in S-T debt	84,306	0	0	0
<b>Modelware EPS (NT\$)</b>	<b>10.05</b>	<b>10.50</b>	<b>11.80</b>	<b>12.36</b>	Cash Dividend Paid	-58,745	-80,089	-83,632	-94,053
					Dir & Emp Bonus Paid	0	0	0	0
					Other adjustments	-12,898	8,534	25,251	24,192
					Exchange rate adjustment	-7,363	500	0	0
					<b>Net change in cash</b>	<b>-173,377</b>	<b>31,420</b>	<b>33,877</b>	<b>31,056</b>

Consolidated Balance Sheet					Consolidated Financial Ratios				
NT\$m (Year End Dec)	2021	2022E	2023E	2024E		2021	2022E	2023E	2024E
Cash	1,059,417	1,090,837	1,124,714	1,155,770	<b>Margins (%)</b>				
Mkt securities	50,541	50,541	50,541	50,541	Gross margin	6.0%	6.2%	6.5%	6.7%
Accounts/Notes receivables	1,161,219	1,195,048	1,265,495	1,333,411	Operating margin	2.5%	2.8%	2.9%	3.1%
Inventory	672,145	690,468	729,288	766,440	Pretax margin	3.2%	3.2%	3.4%	3.4%
Others	91,096	93,750	99,276	104,604	Net margin	2.3%	2.4%	2.5%	2.5%
<b>Current Assets</b>	<b>3,034,417</b>	<b>3,120,643</b>	<b>3,269,314</b>	<b>3,410,765</b>	<b>YoY growth (%)</b>				
Long-term investments	419,243	419,243	419,243	419,243	Sales	11.9%	2.9%	5.9%	5.4%
Fixed assets	310,107	327,632	346,348	365,831	Operating profits	34.4%	14.5%	10.4%	13.9%
Other assets	145,111	145,111	145,111	145,111	Pretax profits	33.1%	2.1%	12.9%	5.0%
<b>Total Assets</b>	<b>3,908,878</b>	<b>4,012,629</b>	<b>4,180,016</b>	<b>4,340,950</b>	Net profits	36.9%	4.4%	12.5%	4.7%
S/T borrowings	546,372	546,372	546,372	546,372	Cash dividend payout ratio	57%	57%	57%	57%
AP/NP	1,076,178	1,105,514	1,167,671	1,227,154	Adjusted cash dividend (NT\$)	5.2	6.0	6.8	7.1
Other ST liabilities	375,130	381,848	403,317	423,863	Yield	5.1%	5.9%	6.7%	7.0%
<b>Total current liabilities</b>	<b>1,997,680</b>	<b>2,033,734</b>	<b>2,117,359</b>	<b>2,197,389</b>	Net Debt/Equity (Net of mkt secs.)	-51%	-57%	-63%	-68%
L/T debt	275,600	275,600	275,600	275,600	Net Debt/Equity	-42%	-48%	-54%	-59%
Other liabilities	62,338	64,155	67,936	71,582	Liabilities/Equity	148%	145%	143%	142%
<b>Total Liabilities</b>	<b>2,335,618</b>	<b>2,373,489</b>	<b>2,460,895</b>	<b>2,544,571</b>	Liabilities/Assets	60%	59%	59%	59%
Common shares	138,630	138,615	138,615	138,615	ROAE	9%	9%	10%	10%
Retained Earnings	563,437	563,437	563,437	563,437	ROAA	4%	4%	4%	4%
<b>Shareholders' equity</b>	<b>1,573,260</b>	<b>1,639,140</b>	<b>1,719,121</b>	<b>1,796,379</b>	AR/NR Turnover (days)	64.0	69.7	68.7	68.9
<b>Total Liab./Shareholders' Equity</b>	<b>3,908,878</b>	<b>4,012,629</b>	<b>4,180,016</b>	<b>4,340,950</b>	AP/NP Turnover (days)	69.4	68.8	67.9	68.1
					Inventory Turnover (days)	40.6	43.0	42.4	42.5
					Cash conversion cycle (days)	35.3	43.9	43.3	43.4

Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimates.

## Exhibit 4: Quarterly financial summary

NT\$m	1Q22	2Q22E	3Q22E	4Q22E	1Q23E	2Q23E	3Q23E	4Q23E	2021	2022E	2023E	2024E
<b>Sales</b>	<b>1,407,553</b>	<b>1,350,867</b>	<b>1,427,250</b>	<b>1,983,130</b>	<b>1,530,232</b>	<b>1,378,821</b>	<b>1,571,475</b>	<b>2,051,920</b>	<b>5,994,174</b>	<b>6,168,801</b>	<b>6,532,448</b>	<b>6,883,024</b>
COGS	-1,322,787	-1,268,586	-1,337,987	-1,856,215	-1,435,691	-1,292,406	-1,468,592	-1,914,172	-5,632,047	-5,785,575	-6,110,861	-6,422,162
<b>Gross profit</b>	<b>84,766</b>	<b>82,282</b>	<b>89,263</b>	<b>126,916</b>	<b>94,541</b>	<b>86,415</b>	<b>102,883</b>	<b>137,748</b>	<b>362,127</b>	<b>383,226</b>	<b>421,588</b>	<b>460,863</b>
Operating Exp.	-48,096	-49,995	-53,206	-61,433	-53,957	-54,663	-60,099	-64,662	-213,168	-212,731	-233,381	-246,534
Promotion	-7,579	-7,163	-7,521	-8,308	-8,239	-7,311	-7,866	-8,596	-30,506	-30,570	-32,013	-33,717
ADM	-18,540	-19,096	-20,051	-21,855	-19,451	-20,035	-21,638	-24,014	-77,593	-79,542	-85,138	-93,548
R&D	-21,978	-23,736	-25,635	-31,270	-26,266	-27,317	-30,595	-32,051	-105,069	-102,619	-116,230	-119,269
<b>Operating profit</b>	<b>36,669</b>	<b>32,286</b>	<b>36,057</b>	<b>65,483</b>	<b>40,584</b>	<b>31,752</b>	<b>42,784</b>	<b>73,087</b>	<b>148,959</b>	<b>170,495</b>	<b>188,207</b>	<b>214,329</b>
Total non-operating Inc.	258	7,957	9,457	9,457	7,957	7,957	9,457	9,457	44,612	27,129	34,828	19,828
<b>Pre-tax profit</b>	<b>36,927</b>	<b>40,243</b>	<b>45,514</b>	<b>74,940</b>	<b>48,541</b>	<b>39,709</b>	<b>52,241</b>	<b>82,544</b>	<b>193,572</b>	<b>197,624</b>	<b>223,035</b>	<b>234,157</b>
Income Tax	-7,318	-10,927	-8,107	-13,238	-9,908	-11,105	-9,585	-15,019	-39,749	-39,591	-45,617	-47,936
Minorities	-159	-2,611	-2,616	-7,164	-175	-2,872	-2,877	-7,881	-14,503	-12,550	-13,805	-14,909
<b>Net Profit</b>	<b>29,450</b>	<b>26,706</b>	<b>34,791</b>	<b>54,537</b>	<b>38,458</b>	<b>25,732</b>	<b>39,779</b>	<b>59,643</b>	<b>139,320</b>	<b>145,484</b>	<b>163,612</b>	<b>171,311</b>
EPS (NT\$)	2.12	1.93	2.51	3.93	2.77	1.86	2.87	4.30	10.05	10.50	11.80	12.36
<b>Margins</b>												
Gross Margin	6.0%	6.1%	6.3%	6.4%	6.2%	6.3%	6.5%	6.7%	6.0%	6.2%	6.5%	6.7%
Operating margin	2.6%	2.4%	2.5%	3.3%	2.7%	2.3%	2.7%	3.6%	2.5%	2.8%	2.9%	3.1%
Pre-tax margin	2.6%	3.0%	3.2%	3.8%	3.2%	2.9%	3.3%	4.0%	3.2%	3.2%	3.4%	3.4%
Net margin	2.1%	2.0%	2.4%	2.8%	2.5%	1.9%	2.5%	2.9%	2.3%	2.4%	2.5%	2.5%
<b>% QoQ</b>												
Sales	-26%	-4%	6%	39%	-23%	-10%	14%	31%				
Gross profit	-26%	-3%	8%	42%	-26%	-9%	19%	34%				
Operating profit	-30%	-12%	12%	82%	-38%	-22%	35%	71%				
Pre-tax profit	-41%	9%	13%	65%	-35%	-18%	32%	58%				
Net Profit	-34%	-9%	30%	57%	-29%	-33%	55%	50%				
<b>% YoY</b>												
Sales	4%	0%	2%	5%	9%	2%	10%	3%	12%	3%	6%	5%
Gross profit	8%	1%	1%	11%	12%	5%	15%	9%	20%	6%	10%	9%
Operating profit	33%	-1%	0%	24%	11%	-2%	19%	12%	34%	14%	10%	14%
Pre-tax profit	-6%	-9%	-5%	20%	31%	-1%	15%	10%	33%	2%	13%	5%
Net profit	5%	-10%	-6%	23%	31%	-4%	14%	9%	37%	4%	12%	5%

Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimates.

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STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
<b>Overweight/Buy</b>	<b>1424</b>	<b>40%</b>	<b>374</b>	<b>44%</b>	<b>26%</b>	<b>626</b>	<b>40%</b>
<b>Equal-weight/Hold</b>	<b>1564</b>	<b>44%</b>	<b>373</b>	<b>44%</b>	<b>24%</b>	<b>705</b>	<b>45%</b>
<b>Not-Rated/Hold</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Underweight/Sell</b>	<b>564</b>	<b>16%</b>	<b>95</b>	<b>11%</b>	<b>17%</b>	<b>219</b>	<b>14%</b>
<b>TOTAL</b>	<b>3,552</b>		<b>842</b>			<b>1550</b>	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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### Stock Price, Price Target and Rating History (See Rating Definitions)



Hon Hai Precision (2317.TW) - As of 5/11/22 in TWD  
Industry : Greater China Technology Hardware



Stock Rating History: 5/1/17 : U/I; 7/13/17 : E/I; 10/24/17 : 0/I; 8/22/18 : E/I; 2/25/20 : 0/I

Price Target History: 4/3/17 : 92.5; 5/9/17 : 102.5; 7/13/17 : 135; 10/24/17 : 168.75; 2/12/18 : 147.5; 4/3/18 : 135; 8/22/18 : 102.5; 11/14/18 : 86; 11/14/19 : 95; 2/25/20 : 115; 3/20/20 : 95; 8/13/20 : 102; 1/6/21 : 130; 3/22/21 : 168; 3/8/22 : 145

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)

Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —

Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View

Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)

Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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#### INDUSTRY COVERAGE: Greater China Technology Hardware

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/12/2022)
<b>Andy Meng, CFA</b>		
BYD Electronics (0285.HK)	O (08/11/2021)	HK\$13.86
China TransInfo Technology Co Ltd (002373.SZ)	U (05/24/2021)	Rmb8.60
Dahua Technology Co. Ltd. (002236.SZ)	O (05/24/2021)	Rmb15.27
Genius Electronic Optical Co. Ltd. (3406.TW)	O (04/05/2022)	NT\$351.00
HIKVision Digital Technology (002415.SZ)	O (11/02/2015)	Rmb34.16
Largan Precision (3008.TW)	O (12/17/2021)	NT\$1,600.00
LianChuang Electronic Technology Co Ltd (002036.SZ)	E (04/05/2022)	Rmb12.36
OFILM Group Co Ltd (002456.SZ)	E (11/04/2021)	Rmb5.57
Q Technology (Group) Company Ltd (1478.HK)	E (04/05/2022)	HK\$4.90
Shenzhen Transsion Holdings Co Ltd (688036.SS)	O (08/12/2021)	Rmb83.37
Sunny Optical (2382.HK)	O (04/05/2022)	HK\$95.30
Wingtech Technology Co Ltd (600745.SS)	E (12/17/2021)	Rmb68.59
Xiaomi Corp (1810.HK)	O (04/14/2021)	HK\$10.36
Yangtze Optical Fibre and Cable JSC Ltd (601869.SS)	U (10/13/2021)	Rmb25.82
Yangtze Optical Fibre and Cable JSC Ltd (6869.HK)	O (12/17/2021)	HK\$11.20
Yongxin Optics Co Ltd (603297.SS)	U (04/05/2022)	Rmb80.94
YuTong Optical Technology Co Ltd (300790.SZ)	E (04/05/2022)	Rmb24.45
Zhejiang Crystal-Optech Co Ltd (002273.SZ)	E (04/05/2022)	Rmb10.01
ZTE Corporation (0763.HK)	O (06/20/2019)	HK\$15.44
ZTE Corporation (000063.SZ)	U (07/02/2021)	Rmb23.36
<b>Derrick Yang</b>		
Advantech (2395.TW)	O (01/20/2021)	NT\$325.50
AirTAC International (1590.TW)	O (01/11/2022)	NT\$805.00
AU Optronics (2409.TW)	U (04/26/2022)	NT\$17.10
BOE Technology (000725.SZ)	O (09/06/2019)	Rmb3.82
Chroma Ate Inc. (2360.TW)	O (10/05/2021)	NT\$153.00
Ennoconn Corporation (6414.TW)	O (01/20/2021)	NT\$192.50
GIS Holding Limited (6456.TW)	O (12/01/2020)	NT\$80.60
Hiwin Technologies Corp. (2049.TW)	O (01/20/2021)	NT\$219.50
Innolux (3481.TW)	U (04/26/2022)	NT\$13.70
Lens Technology (300433.SZ)	E (07/22/2020)	Rmb9.91
Leyard Optoelectronic Co Ltd (300296.SZ)	E (11/03/2020)	Rmb6.17
Radiant Opto-Electronics Corporation (6176.TW)	O (12/01/2020)	NT\$100.00
TCL Corp. (000100.SZ)	E (06/11/2019)	Rmb4.25
Tianma Microelectronics (000050.SZ)	U (01/24/2018)	Rmb9.06
Visionox Technology Inc (002387.SZ)	E (02/18/2020)	Rmb6.03
Wuhan Jingce Electronic Group Co Ltd (300567.SZ)	E (11/26/2021)	Rmb36.56
Wuhu Token Science Co. Ltd. (300088.SZ)	E (12/01/2020)	Rmb6.32
<b>Green Cai</b>		
Accelink Technologies Co. Ltd. (002281.SZ)	U (05/12/2022)	Rmb15.71
Eoptolink Technology Inc Ltd (300502.SZ)	O (05/12/2022)	Rmb26.04
Zhongji Innolight Co Ltd (300308.SZ)	O (05/12/2022)	Rmb31.48
<b>Howard Kao</b>		

Accton Technology Corporation (2345.TW)	E (11/12/2021)	NT\$223.50
Acer Inc. (2353.TW)	U (02/01/2018)	NT\$27.35
Asustek Computer Inc. (2357.TW)	U (07/23/2021)	NT\$338.00
Compal Electronics (2324.TW)	U (12/18/2019)	NT\$23.00
Flexium (6269.TW)	E (04/27/2018)	NT\$90.00
Guangdong Fenghua Adv. Tech. (Hldg) Co (000636.SZ)	E (05/12/2021)	Rmb16.73
Inspur Electronic Information (000977.SZ)	E (02/12/2019)	Rmb25.18
Kinsus Interconnect Tech. (3189.TW)	O (02/06/2020)	NT\$164.00
Legend Holdings Corp (3396.HK)	E (03/29/2018)	HK\$8.86
Lenovo (0992.HK)	E (07/26/2018)	HK\$7.98
Nan Ya PCB (8046.TW)	O (10/22/2021)	NT\$381.00
Pegatron Corporation (4938.TW)	E (03/07/2022)	NT\$67.70
Quanta Computer Inc. (2382.TW)	E (07/28/2021)	NT\$82.10
Shengyi Technology Co Ltd. (600183.SS)	O (07/22/2020)	Rmb16.81
Shennan Circuits Co Ltd (002916.SZ)	O (07/22/2020)	Rmb95.37
Tripod Technology (3044.TW)	E (08/11/2020)	NT\$117.00
Unimicron (3037.TW)	O (10/22/2021)	NT\$208.50
Wistron Corporation (3231.TW)	E (07/26/2018)	NT\$27.00
Wiwynn Corp (6669.TW)	O (08/01/2019)	NT\$923.00
Yageo Corp. (2327.TW)	O (01/04/2022)	NT\$378.00
Zhen Ding (4958.TW)	U (04/24/2020)	NT\$102.00

**Sharon Shih**

AAC Technologies Holdings (2018.HK)	++	HK\$16.08
Asia Vital Components Co. Ltd. (3017.TW)	O (05/14/2021)	NT\$102.00
Auras Technology Co Ltd (3324.TWO)	U (03/21/2022)	NT\$154.00
Catcher Technology (2474.TW)	U (04/23/2021)	NT\$148.50
Delta Electronics Inc. (2308.TW)	O (07/13/2017)	NT\$218.50
Foxconn Industrial Internet Co. Ltd. (601138.SS)	O (07/10/2019)	Rmb9.38
Foxconn Technology (2354.TW)	E (08/16/2016)	NT\$61.00
GoerTek Inc (002241.SZ)	O (06/24/2021)	Rmb35.72
Guangzhou Shiyuan Electronic Tech Co Ltd (002841.SZ)	E (10/28/2021)	Rmb74.87
Hon Hai Precision (2317.TW)	O (02/25/2020)	NT\$102.00
LandMark Optoelectronics Corporation (3081.TWO)	O (01/13/2022)	NT\$134.50
Lingyi Itech Guangdong Co (002600.SZ)	E (09/28/2020)	Rmb4.48
Lite-On Technology (2301.TW)	E (07/31/2020)	NT\$62.60
Luxshare Precision Industry Co., Ltd. (002475.SZ)	O (10/24/2016)	Rmb30.34
MLS Company Limited (002745.SZ)	E (09/10/2018)	Rmb8.73
Sanan Optoelectronics (600703.SS)	U (06/17/2019)	Rmb21.05
Sunonwealth Electric Machine Industry Co (2421.TW)	O (01/21/2022)	NT\$35.80
Tong Hsing (6271.TW)	E (03/18/2019)	NT\$236.00
Visual Photonics Epitaxy Co Ltd (2455.TW)	U (01/12/2022)	NT\$89.80

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.