

March 11, 2015

# Sunny Optical

## Volume Could Exceed Guidance, but Blended ASP and Margin Remain Key Concerns

Industry View	Stock Rating	Price Target
<b>In-Line</b>	<b>Underweight</b>	<b>HK\$9.60</b>

Handset lens volume should remain healthy in 1H15 thanks to Samsung, but CCM remains a drag. Consensus valuation at a lens company multiple (of 15x) is not justified – we don't see lenses (handset + vehicle) contributing 50%+ of net profit by 2017. Retain UW.

What's Changed?	From:	To:
<b>Sunny Optical</b>		
Price Target	HK\$7.00	HK\$9.60
2015e EPS	0.60	0.64
2016e EPS	0.68	0.74

**Our 2015e and 2016e EPS are still 11% and 16% below consensus:** We raise our EPS estimates by 7% for 2015 and 8% for 2016, to reflect higher handset lens volume/GPM and higher OPEX (lens royalty fees to Konica Minolta. We also lift our price target to HK\$9.6 using SOTP (assuming 8.5x for camera module business, 24x for vehicle lenses, 16x for handset lenses, and 6x for others), implying a blended 2015e P/E of 12x.

**Current consensus valuation of 15x for Sunny is not justified:** For Sunny to deserve a lens company valuation (similar to Largan's), our benchmark is for lenses (handset + vehicle) to contribute 50%+ of earnings by 2017. Assuming a NPM of 15% for handset lenses and 20% for vehicle lenses, revenue CAGR for both businesses would need to be at least 50% from a high base in 2015. We see risk skewed to the downside. Further, the analysis ignores declining CCM business profitability, which should weigh on total profit growth and thus the multiple.

**Handset lens volume ahead of expectation; our concern lies in blended ASP:** Our checks suggest that handset lens shipments should remain healthy in 1H15 and could surpass previous levels, mainly thanks to orders from Samsung. We now aggressively forecast handset lens volume to grow another 112% YoY in 2015e and lift our GPM assumption to 30%+, thanks to scale benefit. External clients remain largely Samsung; our checks suggest limited improvement in other handset OEMs, leading to lower ASP. We believe blended ASP could remain flattish YoY unless we see a major breakthrough with other handset OEMs.

**Camera modules remain a drag; blended ASP and GPM a concern:**

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### Sunny Optical ( 2382.HK , 2382 HK )

#### Greater China Technology Hardware / China

Stock Rating	Underweight
Industry View	In-Line
Price target	HK\$9.60
Up/downside to price target (%)	(29)
Shr price, close (Mar 10, 2015)	HK\$13.46
52-Week Range	HK\$14.50-7.02
Sh out, dil, curr (mn)	1,070
Mkt cap, curr (mn)	Rmb11,623
EV, curr (mn)	Rmb11,717
Avg daily trading value (mn)	HK\$75

Fiscal Year Ending	12/14	12/15e	12/16e	12/17e
ModelWare EPS (Rmb)	0.53	0.64	0.74	0.85
Prior ModelWare EPS (Rmb)	0.53	0.60	0.68	-
Consensus EPS (Rmb)\$	-	-	0.86	1.07
Revenue, net (Rmb mn)	8,426	11,814	14,532	17,438
EBITDA (Rmb mn)	964	1,191	1,385	1,592
ModelWare net inc (Rmb mn)	566	684	791	908
P/E	20.2	17.0	14.7	12.8
P/BV	3.5	3.1	2.6	2.3
RNOA (%)	21.6	20.7	19.1	18.7
ROE (%)	19.8	21.0	20.8	20.5
EV/EBITDA	12.0	10.1	8.7	7.7
Div yld (%)	1.0	1.2	1.4	1.6
FCF yld ratio (%)	2.4	(2.2)	(0.5)	(0.6)
Leverage (EOP) (%)	0.5	8.1	8.9	9.7

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework  
\$ = Consensus data is provided by Thomson Reuters Estimates  
e = Morgan Stanley Research estimates

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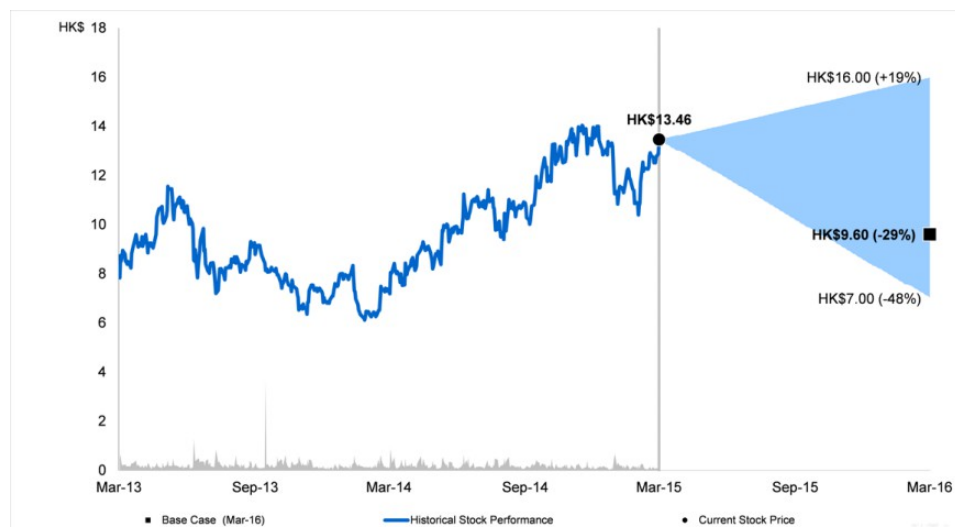
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Despite volume strength and continuing pixel migration, we believe 2H14 camera module ASP grew only 5% YoY. OIS and duo cam volume remains limited. Our checks with premium Chinese brands including OPPO and BBK suggest limited interest in adopting OIS as a differentiator in 2015; metal casings are the key feature in greater focus. Given the intensifying competitive landscape in camera modules, we project merely ~5% YoY blended ASP growth and ~35% YoY volume growth in 2015; our GPM assumption is also below consensus at 10%.

# Risk Reward

Stretched valuation, even on our increased scenario values



Source: Thomson Reuters, Morgan Stanley Research

**Price Target**   **HK\$9.6**      Base case, SOTP valuation

**Bull**                      **HK\$16**                      1) CCM GPM turns up in 2015, thanks to pixel migration and mass adoption of new function. 2) Revenue from vehicle and handset lenses grows faster than expected.

**Base**                      **HK\$9.6**                      1) CCM GPM continues to trend down in 2015, 2) Vehicle/handset lens revenue contribution hits 10% of sales.

**Bear**                      **HK\$7**                      1) Higher contribution from vehicle/handset lenses fails to mitigate blended GPM decline. 2) Chinese smartphone volume growth continues to decelerate because of 3G model decline.

## Investment Thesis

- We view Sunny as a proxy for our outlook for China's smartphone market. As growth in this market slows, we expect the same for Sunny's profitability
- Pixel migration deceleration after 8MP should stall camera module blended ASP
- Vehicle lenses, smart TV modules, and infrared lenses have yet to become the next growth drivers, while the camera module business is slowing down
- We believe the stock merits a blended 2015e P/E of 12x, given Sunny's commodity-like single-product exposure

## Key Value Drivers

- Smartphone shipment growth of Chinese handset OEMs
- Pixel migration, rising ASP

## Potential Catalysts

- Lower camera module monthly shipment could raise concern on GPM
- 

## Risks to Achieving Price Target

- Shipments to overseas markets from Chinese OEMs (Huawei, Lenovo, etc.) are higher than expected
- Improvement in handset/vehicle lenses comes faster than expected

## Analysis

### Exhibit 1: Sunny Optical: Sum-of-the-Parts Valuation

	Rmb mn	% of NP	P/E (x)	Market Cap (Rmb mn)
<b>2015 Net Profit</b>	<b>684</b>			
Camera Module	410	60%	8.5	3,487
Vehicle Lens	103	15%	24.0	2,461
Handset Lens	123	18%	16.0	1,969
Others (DSLR, etc)	48	7%	6.0	287
<b>Total</b>				<b>8,204</b>
<b>Implied Price Target (HKD)</b>				<b>9.6</b>
<b>Implied Blended 2015e P/E (x)</b>				<b>12.0</b>

Source: Morgan Stanley Research estimates

We change our valuation method from a residual income model to sum-of-the-parts – the market is becoming more aware of Sunny's lens business growth, thus it is a key debate. A sum-of-the-parts approach enables us to reference the different aspects of the business more transparently.

We value Sunny's camera module business at a 2015e P/E of 8.5x, at a premium to Q-Tech (1478.HK, Not Covered), which currently trades at 7x (based on consensus estimates). We cite Sunny's higher quality and better ability to produce premium modules (including OIS, duo camera etc). Our prior assumption was 7.5x, which was at par with Q-Tech.

We value the handset lens business at 16x, on par with Largan. We think this is appropriate because Sunny has penetrated large handset OEMs such as Samsung. Our prior assumption was 14x; our increase reflects higher revenue CAGR during 2015-2017e.

We value the vehicle lens business at 24x thanks to its stability, higher entry barriers, and stable GPM. Our prior assumption was 16x, in line with global auto parts multiple average; our increase reflects the scarcity of automobile electronics plays in the HK market.

Our price target of HK\$9.6 implies a blended 2015e P/E of 12x.

**Our bull case value rises 7%, to HK\$16:** In our bull case scenario, we factored in higher camera module GPM assumptions and faster lens volume growth. Since the transition towards a focus on lens products is faster than expected, we view an implied multiple of 15x as appropriate.

**Our bear case value rises 40%, to HK\$7:** We lift our bear case scenario EPS by 40% to factor in higher CCM volume/GPM assumptions and higher vehicle/handset revenue. Our implied multiple remains 8x

**Exhibit 2:** Sunny Optical: What's Changed in Our Estimates

	2015e			2016e		
	New	Old	Diff	New	Old	Diff
Net sales	11,814	10,901	8%	14,532	12,578	16%
Gross profit	1,728	1,538	12%	2,093	1,783	17%
Operating income	738	707	4%	862	809	7%
Pre-tax income	791	742	7%	916	844	8%
<b>Net income</b>	<b>684</b>	<b>637</b>	<b>7%</b>	<b>791</b>	<b>724</b>	<b>9%</b>
Basic EPS (RMB)	0.64	0.60	7%	0.74	0.68	9%
Gross Margin	14.6%	14.1%		14.4%	14.2%	
OPEX	-8.4%	-7.6%		-8.5%	-7.7%	
Operating Margin	6.2%	6.5%		5.9%	6.4%	
Pretax Margin	6.7%	6.8%		6.3%	6.7%	
Net Margin	5.8%	5.8%		5.4%	5.8%	

Source: Morgan Stanley Research estimates

Our change in 2015 and 2016 EPS estimates mainly comes from higher handset lens volume; we lift our volume growth forecast to 112% YoY from 40% YoY in 2015. Handset lenses carry higher GPM, so overall corporate GPM improves. We also increase our OPEX assumption to reflect higher handset lens royalty fees to Konica Minolta.

We previously underestimated handset lens volume growth. We differ from consensus mainly on CCM GPM.

**Exhibit 3:** Sunny Optical: Morgan Stanley estimates vs. consensus

	2015e			2016e		
	MS	Consensus	Diff	MS	Consensus	Diff
Net sales	11,814	10,797	9%	14,532	12,980	12%
Gross profit	1,728	1,710	1%	2,093	2,079	1%
Operating income	738	875	-16%	862	1,095	-21%
Pre-tax income	791	896	-12%	916	1,101	-17%
<b>Net income</b>	<b>684</b>	<b>767</b>	<b>-11%</b>	<b>791</b>	<b>938</b>	<b>-16%</b>
Basic EPS (RMB)	0.64	0.72	-11%	0.74	0.88	-16%
Gross Margin	14.6%	13.44		14.4%	16.0%	
OPEX	-8.4%	-7.7%		-8.5%	-7.6%	
Operating Margin	6.2%	8.1%		5.9%	8.4%	
Pretax Margin	6.7%	8.3%		6.3%	8.5%	
Net Margin	5.8%	7.1%		5.4%	7.2%	

Source: Bloomberg consensus, Morgan Stanley Research estimates.

## Exhibit 4: Sunny Optical: Financial Summary

## Consolidated Income Statement

	2014	2015E	2016E	2017E
Net sales	8,426	11,814	14,532	17,438
COGS	(7,137)	(10,086)	(12,438)	(14,962)
Gross profit	1,289	1,728	2,093	2,476
Other operating income	81	68	68	68
Operating expenses	(712)	(991)	(1,231)	(1,477)
Selling expenses	(89)	(108)	(134)	(160)
ADM	(231)	(301)	(374)	(449)
R&D	(392)	(582)	(723)	(868)
Operating income	577	738	862	999
Investment income	1	-	-	-
Interest expense	(14)	(14)	(14)	(14)
Pre-tax income	634	791	916	1,052
Income tax	(73)	(111)	(128)	(147)
Minority interests	(5)	(3)	(3)	(3)
Net income	566	684	791	908
EPS	0.53	0.64	0.74	0.85

## Consolidated Balance Sheet

	2014	2015E	2016E	2017E
Bank balances and cash	505	415	329	223
Trade receivables	2,388	3,684	4,984	6,579
Deposits, prepayments and other	4	4	4	4
Inventories	896	1,392	1,889	2,499
Current Assets	4,204	5,907	7,617	9,717
Property, plant and equipment	1,035	1,050	944	769
Land use rights	116	116	116	116
Other assets	238	238	238	238
Total Assets	5,594	7,311	8,916	10,840
Trade payables	1,744	2,712	3,679	4,868
Other payables and accrued expenses	31	40	52	68
Bank loans - due within one year	522	722	722	722
Current Liabilities	2,297	3,473	4,452	5,657
Other liabilities	46	46	46	46
Total Liabilities	2,343	3,520	4,499	5,703
Share capital	105	105	105	105
Reserves and minority interests	3,145	3,686	4,312	5,032
Shareholders' equity	3,251	3,791	4,417	5,137
Total Liab./Shareholders' Equity	5,594	7,311	8,916	10,840

## Consolidated Cash Flow Statement

	2014E	2015E	2016E	2017E
Cashflow from operations	109	247	422	426
Profits from operation	634	791	916	1,052
Depreciation & Amortization	305	385	455	525
Change in Working Capital	(753)	(815)	(818)	(1,001)
Interest paid	(30)	(30)	(30)	(30)
Income taxes paid	(73)	(111)	(128)	(147)
Cashflow from investing	224	(400)	(350)	(350)
(Purchases) sale of PPE	(369)	(400)	(350)	(350)
Increase in bank deposits	-	-	-	-
Cashflow from financing	(81)	63	(158)	(182)
Issuance of stock	-	-	-	-
Increase in bank loans	33	200	-	-
Cash dividends	(113)	(137)	(158)	(182)
Others	-	-	-	-
Net Change in Cash	(204)	(89)	(86)	(105)

## Consolidated Financial Ratios

	2014	2015E	2016E	2017E
Margins				
Gross margin	15.3%	14.6%	14.4%	14.2%
Operating margin	6.8%	6.2%	5.9%	5.7%
Pretax margin	7.5%	6.7%	6.3%	6.0%
Net margin	6.7%	5.8%	5.4%	5.2%
YoY growth				
Sales	45.0%	40.2%	23.0%	20.0%
Operating profits	24.9%	27.8%	16.9%	15.8%
Pretax profits	25.7%	24.8%	15.7%	14.9%
Net profits	28.5%	20.8%	15.7%	14.9%
Cash dividend payout ratio	20%	20%	20%	20%
Net Debt/Equity	1%	8%	9%	10%
Liabilities/Equity	72%	93%	102%	111%
Liabilities/Assets	42%	48%	50%	53%
ROAE	19%	19%	19%	19%
ROAA	11%	11%	10%	9%
AR/NR Turnover (days)	77	94	109	121
AP/NP Turnover (days)	77	81	94	104
Inventory Days	43	41	48	54
Cash conversion cycle (days)	43	55	63	70

Source: Company data, Morgan Stanley Research estimates

## Exhibit 5: Sunny Optical: Earnings Summary

RMB m	1H12	2H12	1H13	2H13	1H14	2H14	1H15E	2H15E	1H16E	2H16E	2012	2013	2014	2015E	2016E
<b>Net sales</b>	<b>1,770</b>	<b>2,215</b>	<b>2,786</b>	<b>3,027</b>	<b>3,836</b>	<b>4,590</b>	<b>5,490</b>	<b>6,324</b>	<b>6,882</b>	<b>7,650</b>	<b>3,984</b>	<b>5,813</b>	<b>8,426</b>	<b>11,814</b>	<b>14,532</b>
COGS	(1,430)	(1,814)	(2,345)	(2,500)	(3,275)	(3,863)	(4,694)	(5,392)	(5,903)	(6,536)	(3,243)	(4,846)	(7,137)	(10,086)	(12,438)
<b>Gross profit</b>	<b>340</b>	<b>401</b>	<b>440</b>	<b>527</b>	<b>562</b>	<b>728</b>	<b>796</b>	<b>932</b>	<b>979</b>	<b>1,115</b>	<b>741</b>	<b>967</b>	<b>1,289</b>	<b>1,728</b>	<b>2,093</b>
Operating expenses	(175)	(203)	(224)	(281)	(293)	(420)	(460)	(530)	(577)	(654)	(378)	(505)	(712)	(991)	(1,231)
Selling expenses	(32)	(33)	(42)	(46)	(43)	(46)	(50)	(58)	(63)	(71)	(64)	(88)	(89)	(108)	(134)
ADM	(68)	(82)	(81)	(86)	(101)	(130)	(140)	(161)	(175)	(199)	(150)	(166)	(231)	(301)	(374)
R&D	(75)	(88)	(102)	(149)	(149)	(243)	(270)	(311)	(339)	(384)	(163)	(251)	(392)	(582)	(723)
<b>Operating income</b>	<b>165</b>	<b>198</b>	<b>216</b>	<b>246</b>	<b>269</b>	<b>308</b>	<b>336</b>	<b>402</b>	<b>402</b>	<b>460</b>	<b>363</b>	<b>462</b>	<b>577</b>	<b>738</b>	<b>862</b>
<b>Non-operating income</b>	<b>22</b>	<b>11</b>	<b>19</b>	<b>23</b>	<b>32</b>	<b>25</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>27</b>	<b>33</b>	<b>43</b>	<b>57</b>	<b>54</b>	<b>54</b>
<b>Pre-tax income</b>	<b>188</b>	<b>209</b>	<b>235</b>	<b>269</b>	<b>301</b>	<b>333</b>	<b>363</b>	<b>428</b>	<b>429</b>	<b>487</b>	<b>397</b>	<b>504</b>	<b>634</b>	<b>791</b>	<b>916</b>
Income tax	(32)	(26)	(41)	(23)	(47)	(26)	(51)	(60)	(60)	(68)	(58)	(64)	(73)	(111)	(128)
Minority interests	(2)	(6)	(2)	2	(3)	(2)	(2)	(2)	(2)	(2)	(7)	0	(5)	(3)	(3)
<b>Net income</b>	<b>157</b>	<b>189</b>	<b>197</b>	<b>244</b>	<b>257</b>	<b>309</b>	<b>314</b>	<b>370</b>	<b>370</b>	<b>421</b>	<b>346</b>	<b>440</b>	<b>566</b>	<b>684</b>	<b>791</b>
<b>Margins</b>															
Gross margin	19.2	18.1	15.8	17.4	14.6	15.9	14.5	14.7	14.2	14.6	18.6	16.6	15.3	14.6	14.4
Operating margin	9.3	8.9	7.8	8.1	7.0	6.7	6.1	6.3	5.8	6.0	9.1	7.9	6.8	6.2	5.9
Pre-tax margin	10.6	9.4	8.5	8.9	7.8	7.3	6.6	6.8	6.2	6.4	10.0	8.7	7.5	6.7	6.3
Net margin	8.9	8.5	7.1	8.0	6.7	6.7	5.7	5.9	5.4	5.5	8.7	7.6	6.7	5.8	5.4
<b>% HoH</b>															
Sales	26.8	25.2	25.8	8.7	26.7	19.7	19.6	15.2	8.8	11.2					
Gross profit	18.4	18.0	9.8	19.6	6.6	29.6	9.4	17.0	5.1	13.9					
Operating profit	43.6	20.0	9.0	13.9	9.3	14.7	9.0	19.5	0.1	14.5					
Pre-tax profit	45.1	11.5	12.6	14.3	11.7	11.0	8.8	18.0	0.1	13.6					
Net profit	26.8	20.4	4.2	23.8	5.5	20.3	1.5	18.0	0.1	13.6					
<b>% YoY</b>															
Sales	60.5	58.7	57.4	36.7	37.7	51.6	43.1	37.8	25.3	21.0	59%	46%	45%	40%	23%
Gross profit	44.2	39.8	29.5	31.3	27.5	38.2	41.8	28.0	22.9	19.6	42%	30%	33%	34%	21%
Operating profit	73.8	72.3	30.8	24.1	24.5	25.3	25.0	30.2	19.6	14.6	73%	27%	25%	28%	17%
Pre-tax profit	70.0	61.8	25.5	28.6	27.6	23.9	20.7	28.5	18.1	13.7	66%	27%	26%	25%	16%
Net profit	71.2	52.7	25.5	29.0	30.6	26.8	22.1	19.7	18.0	13.7	61%	27%	29%	21%	16%

Source: Company data, Morgan Stanley Research estimates



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### Global Stock Ratings Distribution

(as of February 28, 2015)

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Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.



STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)		
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY
Overweight/Buy	1161	35%	321	41%	28%
Equal-weight/Hold	1459	44%	370	47%	25%
Not-Rated/Hold	101	3%	10	1%	10%
Underweight/Sell	609	18%	88	11%	14%
<b>TOTAL</b>	<b>3,330</b>		<b>789</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.

## Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

## Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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



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 Ratings/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)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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## INDUSTRY COVERAGE: Greater China Technology Hardware

COMPANY (TICKER)	RATING (AS OF)	PRICE* (03/10/2015)
<b>Chen, Grace</b>		
Acer Inc. (2353.TW)	U (07/11/2013)	NT\$21.35
Asustek Computer Inc. (2357.TW)	O (02/10/2014)	NT\$324.00
Casetek Holdings (5264.TW)	E (01/13/2015)	NT\$178.00
Catcher Technology (2474.TW)	O (04/10/2013)	NT\$297.00
Chroma Ate Inc. (2360.TW)	E (07/21/2011)	NT\$79.30
Compal Electronics (2324.TW)	E (08/30/2009)	NT\$26.85
Delta Electronics Inc. (2308.TW)	O (03/04/2014)	NT\$207.00
Digital China Holdings Limited (0861.HK)	E (06/20/2013)	HK\$7.25
Hiwin Technologies Corp. (2049.TW)	U (11/01/2012)	NT\$253.00
Inspur Electronic Information (000977.SZ)	O (10/02/2014)	Rmb49.95
Lenovo (0992.HK)	E (01/31/2014)	HK\$11.64
Pegatron Corporation (4938.TW)	O (08/29/2012)	NT\$88.50
Quanta Computer Inc. (2382.TW)	O (04/20/2011)	NT\$79.00
Synnex Technology International Corp. (2347.TW)	E (08/08/2014)	NT\$44.75
Wistron Corporation (3231.TW)	O (08/08/2014)	NT\$29.05
<b>Lin, Brad</b>		
Tong Hsing (6271.TW)	O (01/17/2014)	NT\$118.50
<b>Lu, Jasmine</b>		
AAC Technologies Holdings (2018.HK)	O (08/21/2013)	HK\$53.30
FIH Mobile Ltd (2038.HK)	O (09/25/2014)	HK\$3.66
Hon Hai Precision (2317.TW)	E (12/05/2014)	NT\$87.10
HTC Corporation (2498.TW)	U (05/03/2013)	NT\$143.50
Largan Precision (3008.TW)	E (04/26/2013)	NT\$2,660.00
<b>Shih, Sharon</b>		
AU Optonics (2409.TW)	O (05/01/2013)	NT\$15.05
Epistar (2448.TW)	O (05/07/2010)	NT\$58.30
Everlight Electronics Co., Ltd. (2393.TW)	E (08/17/2011)	NT\$79.40
Flexium (6269.TW)	U (09/26/2013)	NT\$80.30
Foxconn Technology (2354.TW)	E (12/05/2014)	NT\$79.70
Innolux (3481.TW)	E (03/19/2014)	NT\$15.15
Kinsus Interconnect Tech. (3189.TW)	U (09/26/2013)	NT\$105.00
Sanan Optoelectronics (600703.SS)	E (08/22/2014)	Rmb18.54
Shenzhen O-film Tech (002456.SZ)	E (09/25/2014)	Rmb23.63
TPK Holding (3673.TW)	U (11/01/2013)	NT\$225.00
Tripod Technology (3044.TW)	E (10/06/2014)	NT\$64.60
Unimicron (3037.TW)	O (10/22/2014)	NT\$21.60
Zhen Ding (4958.TW)	O (06/06/2014)	NT\$103.50
<b>Tsai, Yunchen</b>		
BYD Electronics (0285.HK)	O (09/25/2014)	HK\$9.00
Everwin Precision Technology (300115.SZ)	E (09/25/2014)	Rmb25.38
GoerTek Inc (002241.SZ)	E (02/12/2015)	Rmb31.00
Sunny Optical (2382.HK)	U (01/20/2014)	HK\$13.46
TCL Communication (2618.HK)	O (09/25/2014)	HK\$7.99
ZTE Corporation (000063.SZ)	O (09/25/2014)	Rmb19.86
ZTE Corporation (0763.HK)	O (10/04/2013)	HK\$17.58

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\* Historical prices are not split adjusted.