

## Epistar

Utilization rate approaches peak level during down season; Margin expansion is all about product mix in 2Q14

Since the previous trough in November 2013, Epistar's share has risen 51% (vs. Taixex up 2%). As the demand is fueled by LED general lighting and UHD TV new models, we expect over-supply glut to narrow further in 2014. We raise our 2014/2015 earnings estimate meaningfully, with the caution that the conversion options from Epistar's CB could lead to significant evaluation loss in 1Q14 that could trigger profit-taking pressure; but even on a fully-diluted basis, the share price remains below the previous mid-cycle P/B. We also expect the Street's earnings upgrades to serve as a further catalyst. Reiterate OW and recommend investors to accumulate Epistar on weakness.

- 4Q and 1Q do not look like down season:** LED industry typically clears inventory during 4Q and 1Q. However, this time around Epistar cleared much of the low-margin products during early 4Q13, thus high-margin AlGaInP ("4-element") LED demand should hold up well in 4Q13 and 1Q14. This, we estimate, will allow GM to be maintained at a similar level to the peak season. Looking at 1Q14, management indicates that AlGaInP will run at full-loading rates, and InGaN at 90%+ utilization rate. We believe 2Q14 GM could rise meaningfully further on full-utilization rates and favorable product mix towards flip-chip, high-voltage, high-power, and Epistar's package-free Embedded LED Chip ("ELC"); these products carry 25%+ GM.
- ECB conversion could have adverse impact on share price and earnings:** Based on the terms of Epistar's 5th ECB, the bondholders are entitled the right to convert their bonds into common shares at NT\$65.13 per share. At full conversion, this implies 11% equity dilution, and could lead to a significant non-cash evaluation loss in 1Q14 when the end-1Q14 share price exceeds December 31, 2013 share price of NT\$57.4.
- Valuation and stock recommendation:** We raise 2013/2014/2015 earnings estimates to reflect the stronger-than-expected demand and raise our Dec-14 price target to NT\$80, based on 1.7x FY14E P/B on a fully-diluted basis (mid-cycle valuation). We believe the risk-reward remains favorable and recommend that investors accumulate the shares on pull-backs in view of the soaring LED lighting demand and improved supply/demand balance.

### Bloomberg 2448 TT, Reuters 2448.TW

(Year-end Dec, NT\$ bn)	FY12	FY13E	FY14E	FY15E	FY12	FY13E	FY14E	FY15E	Date of Price	05 Feb 14
Sales	19.9	22.3	25.9	25.8	Sales growth	(9.3%)	11.6%	16.3% (0.4%)	52-Week range	NT\$70.30-42.55
Operating Profit	-1.2	0.4	2.0	3.5	OP growth	(5385.0%)	(132.4%)	407.8% 74.5%	Market Cap	NT\$61,884B
EBITDA	3.3	4.8	6.1	7.1	NP growth	236.6%	(102.4%)	2162.6% 73.6%	Market Cap	US\$2,043MM
Net profit	-3.5	0.1	1.9	3.3	<b>Quarterly EPS (NT\$)</b>				Share Out. (Com)	933MM
EPS	-4.1	0.1	2.0	3.5	EPS (12)	-0.6	0.4	0.2 -1.3	Free float	-
BPS (NT\$)	50.6	50.9	52.9	55.5	EPS (13) E	-0.3	0.4	-0.1 0.0	Avg daily val	NT\$0.6B
P/E (x)	NM	738.3	32.7	18.8	EPS (14) E	0.1	0.6	0.8 0.6	Avg daily val (US\$)	19.5MM
P/BV (x)	1.3	1.3	1.3	1.2	Difference (%)	13.6			Avg daily vol.	10.3MM shares
ROE (%)	-7.2	0.2	3.9	6.5	Price Target	80			Dividend yield (%)	0.0
Net Debt	0.2	2.4	2.0	-0.3	Consensus PT	70			Exchange Rate	30.30
					Price Target End Date	31-Dec-14				

Source: Company data, Bloomberg, J.P. Morgan estimates.

## Overweight

2448.TW, 2448 TT

Price: NT\$66.30

▲ Price Target: NT\$80.00  
Previous: NT\$70.00

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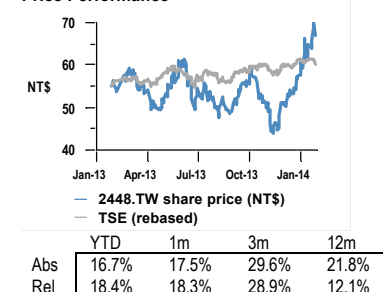
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### Price Performance



See page 12 for analyst certification and important disclosures, including non-US analyst disclosures.

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Key catalysts for the stock price:	Upside risks to our view:	Downside risks to our view:
1.) Strong demand surge from mid-power mainstream products 2.) Government initiatives to ban incandescent light	1.) Price hikes on LED chips 2.) Faster adoption of chip scale packaging and faster improvement of yield rate 3.) Faster penetration of 4K2K TV	1) Weaker-than-expected LED TV demand 2) Slower-than-expected LED lighting adoption 3) Increasing vertical integration from panel makers 4) A sudden increase in LED chip supply from competitors

Key financial metrics	FY12A	FY13E	FY14E	FY15E
Revenues (NT\$ mn)	19,931	22,251	25,880	25,784
Revenue growth (%)	-9%	12%	16%	0%
Operating Profit (NT\$ mn)	-1,203	390	1,982	3,458
EBITDA (NT\$ mn)	3,287	4,778	6,084	7,063
EBITDA margin (%)	16%	21%	23%	27%
Tax rate (%)	7%	19%	6%	6%
Net profit (NT\$ mn)	-3,543	84	1,895	3,289
EPS (NT\$)	(4.12)	0.09	2.03	3.52
EPS growth (%)	-234%	102%	2160%	74%
DPS (NT\$)	0.00	0.00	0.00	0.90
BVPS (NT\$)	50.60	50.88	52.91	55.53
Free cash flow (NT\$ mn)	-446	-2,369	496	3,092
Interest cover (X)	16.9	411.1	371.7	748.2
Net margin (%)	-18%	0%	7%	13%
Sales/assets (X)	0.29	0.33	0.38	0.36
Debt/equity (%)	26%	23%	23%	22%
Net debt/equity (%)	0%	5%	4%	0%
ROE (%)	-7%	0%	4%	6%
Key model assumptions	FY12A	FY13E	FY14E	FY15E
ASP (NT\$)	0.32	0.31	0.31	0.30
Shipment (K)	51184	71250	81075	84570

Source: Company, J.P. Morgan estimates.

Sensitivity analysis	OP		EPS	
Sensitivity to	FY13E	FY14E	FY13E	FY14E
1% change in volume growth	8%		8%	
1% change in ASP	13%		13%	
1% change in FX	1%		1%	

Source: J.P. Morgan estimates.

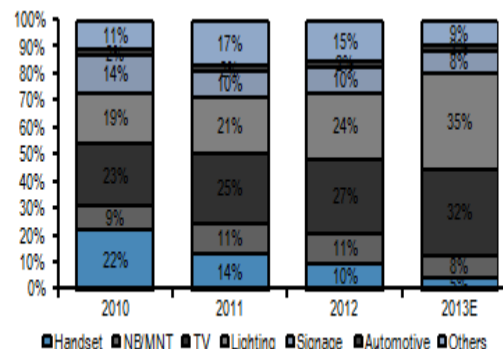
Comparative metrics	CMP	Mkt Cap	P/E		P/BV		ROE		YTD
	LC	\$Mn	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E	Stock perf.
Epistar	66.3	2,041	738.3	32.7	1.3	1.3	0%	4%	16%
Cree	57.99	7,056	78.4	54.7	2.4	2.3	6%	7%	-7%
Everlight	72.8	1,017	21.1	14.8	1.9	1.8	9%	13%	6%
Seoul Semi	45450	2,454	53.3	22.6	4.2	3.6	8%	17%	13%
LG Innotek	83100	1,553	107.9	11.8	1.3	1.2	1%	10%	-1%

Source: Bloomberg, Company and J.P. Morgan estimates. Prices are as of Feb 5, 2014

#### Valuation and price target basis

Our Dec-14 price target to NT\$80, based on 1.7x FY14E P/B on a fully-diluted basis (median P/B from the previous LED TV cycle).

#### Epistar Revenue mix by application (%)



Source: Company, J.P. Morgan estimates.

#### JPM vs. consensus, change in estimates

EPS	FY13E	FY14E
JPM old	0.0	1.8
JPM new	0.1	2.0
% chg	0%	11%
Consensus	0.2	1.8

Source: Bloomberg, J.P. Morgan estimates.

## 4Q13 Preview & 1H14 Outlook

LED industry typically clears inventory during 4Q and 1Q. However, this time around Epistar cleared much of the low-margin products during early 4Q13, and high-margin AlGaInP (“4-element”) LED demand should hold up well in 4Q13 and 1Q14. This, we believe, will allow GM to be maintained at a similar level to last-year’s peak season. Looking at 1Q14, management indicates AlGaInP will run at full-loading rates, and InGaN at 90%+ utilization rate. We believe 2Q14 GM could rise meaningfully further on full-utilization rates and favorable product mix toward flip-chip, high-voltage, high-power, and Epistar’s Embedded LED Chip (“ELC”). These products carry 25%+ GM, and we estimate they represent roughly 10-15% of Epistar’s total revenue. AlGaInP, which represents roughly 30% of Epistar’s revenue, carry 30-40% GM. In short, we expect GM to surpass 20% in 2Q14.

**Table 1: J.P. Morgan earnings estimate revisions**

NT\$ in millions, %, year-end December

	Revised			Prior			Change		
	2013E	2014E	2015E	2013E	2014E	2015E	2013E	2014E	2015E
<b>Sales</b>	<b>22,251</b>	<b>25,880</b>	<b>25,784</b>	<b>21,192</b>	<b>21,913</b>	<b>21,975</b>	<b>5%</b>	<b>18%</b>	<b>17%</b>
Gross profit	3,132	5,148	6,351	2,809	4,432	5,558	11%	16%	14%
Gross Margin	14%	20%	25%	13%	20%	25%	82 bps	-34 bps	-66 bps
Operating profit	390	1,982	3,458	218	1,748	3,092	79%	13%	12%
OPM	2%	8%	13%	1%	8%	14%	73 bps	-32 bps	-66 bps
Net income	84	1,895	3,289	1	1,706	2,991	5507%	11%	10%
Net Margin	0%	7%	13%	0%	8%	14%	37 bps	-46 bps	-86 bps
EPS (NT\$)	0.1	2.0	3.5	0.0	1.8	3.2	5507%	11%	10%
BVPS (NT\$)	50.9	52.9	55.5	50.8	52.6	55.0	0%	1%	1%

Source: J.P. Morgan estimates

**Table 2: J.P. Morgan estimates vs. Bloomberg consensus**

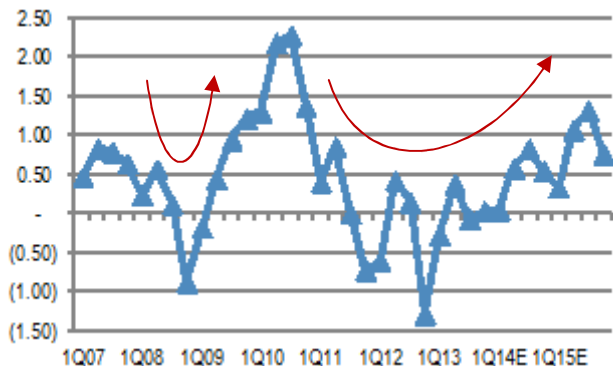
NT\$ in millions, %, year-end December

	4Q13E		1Q14E		FY14E		FY15E	
	JPM	Cons.	JPM	Cons.	JPM	Cons.	JPM	Cons.
Revenues	6,105	5,430	5,522	5,361	25,880	25,227	25,784	28,092
Operating Profit	105	(11)	52	20	1,982	1,486	3,458	2,421
OPM	1.7%	-0.2%	0.9%	0.4%	7.7%	5.9%	13.4%	8.6%
Net Income	36	94	49	4	1,895	1,674	3,289	2,891
NM	0.6%	1.7%	0.9%	0.1%	7.3%	6.6%	12.8%	10.3%
EPS, NT\$	0.0	0.1	0.1	0.0	2.0	1.8	3.5	3.0

Source: Bloomberg consensus, J.P. Morgan estimates.

Figure 1: Epistar: EPS trend

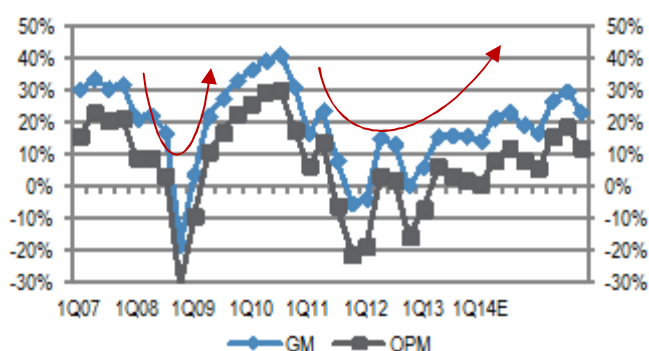
NT\$



Source: Company data, J.P. Morgan estimates.

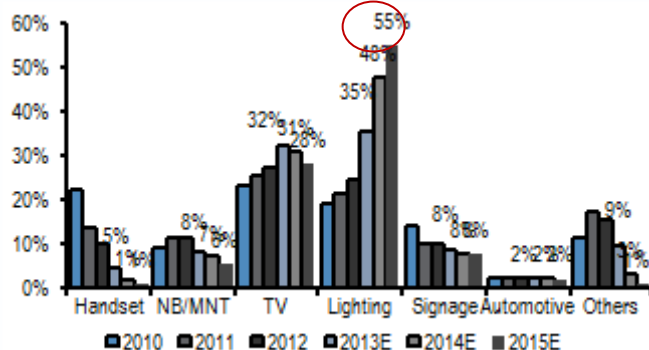
Figure 2: Epistar: GM and OPM trend

%



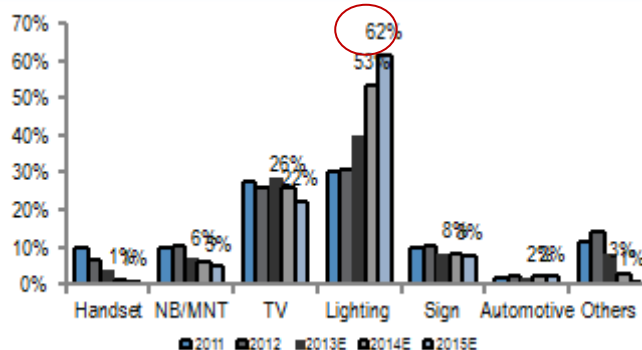
Source: Company data, J.P. Morgan estimates.

Figure 3: Epistar: Revenue mix



Source: Company data, J.P. Morgan estimates.

Figure 4: Epistar: Gross profit mix



Source: Company data, J.P. Morgan estimates.

### Chip supply/demand improves further

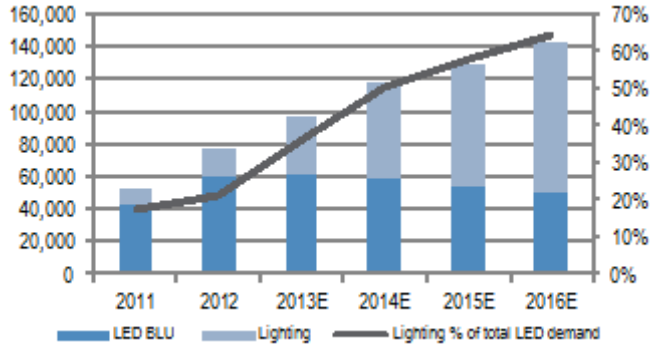
We expect demand for MOCVDs to surge in mid-2014, not only because available LED production capacity is exhausted for Tier-1 chipmakers, but also because 2009 vintage machines will be replaced, owing to the introduction of next-generation equipment yielding a major increase in throughput. Chip capacity could grow 12% in 2014 but this remains well below the 22% LED chip demand growth, implying oversupply in chips may return to balance after mid-2014, in our view.

We believe LED package and LED lighting module costs should continue to decline at about 20% and 14% CAGRs, respectively, through 2020, which could expedite the speed of LED lighting adoption. In particular, after 40W-equivalent LED light bulbs falling below US\$10 retail price in 2013, we expect 60W-equivalent LED light bulbs to touch below US\$10 retail price in 2014. We also expect an incandescent ban policy by governments around the world to stimulate replacement cycle.

Refer to our note "[LED Industry: A bright spot in 2014 tech](#)", published on January 14, 2014.

Figure 5: LED demand by major category

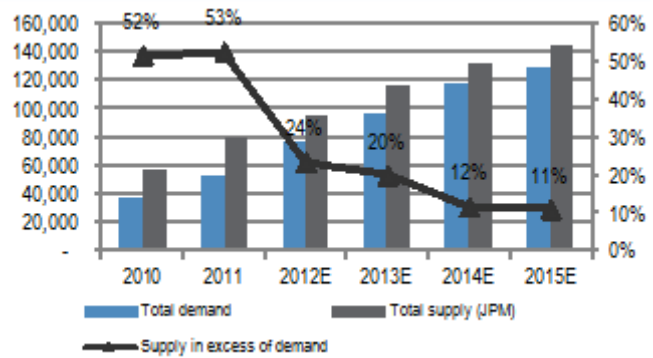
Millions of chips in 500µm x 500µm LED size, %



Source: Display Search, J.P. Morgan

Figure 6: LED chip supply/demand

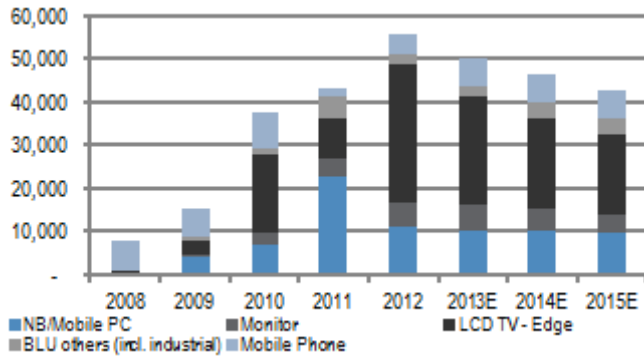
Millions of chips in 500µm x 500µm LED size, %



Source: McKinsey, J.P. Morgan.

Figure 7: LED BLU demand by end-application

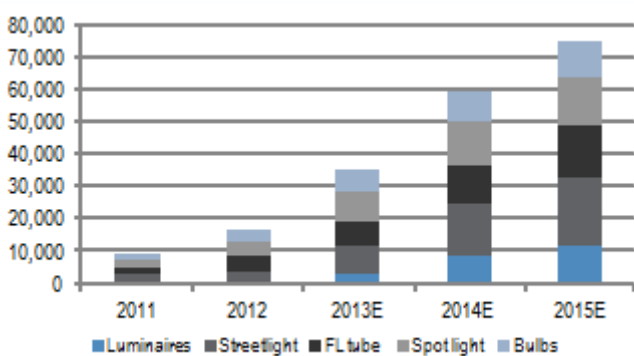
Millions of chips in 500µm x 500µm LED size, %



Source: Display Search, J.P. Morgan

Figure 8: LED lighting demand by end-application

Millions of chips in 500µm x 500µm LED size, %



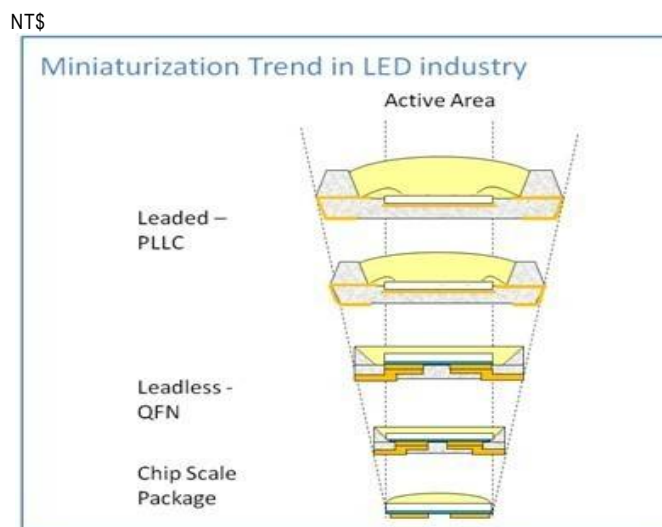
Source: McKinsey, J.P. Morgan.

### What is Chip Scale Packaging/Embedded LED Chip?

Chip Scale Packaging (or what Epistar called “Embedded LED Chip”) reduces lead frame and wire bonding, and only requires a chip, phosphor and glue. As a result, the chip can directly use surface-mount technology (SMT). The ELC can be applied in advance onto backlight products, and possesses an advantage of wide light beam angles. There is an opportunity to omit secondary optical lenses in the future.

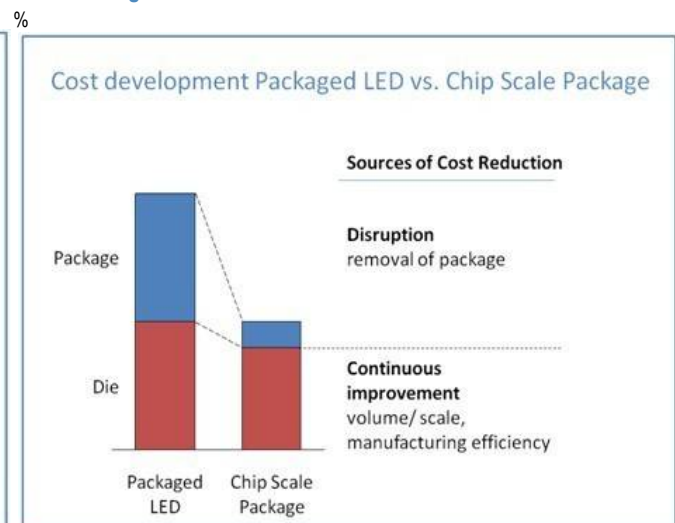
The LED industry is continually seeking methods of lowering chip costs. Large LED chip manufacturers are actively developing package free products. Following TSMC's Solid State Lighting and Toshiba's release of package free LED chip products, Epistar has also unveiled its ELC product and has a high chance to use these ELC chips in the latest Samsung LED TV model, in our view. ELC can reduce the direct-type LED TV number of chips by 20% but at the same time it carries +20% higher ASP compared to normal LED chips. In our understanding, low yield rate and high manufacturing cost remain a challenge for the chip scale packaging technology, **therefore we may not see material adverse impact on pure packagers like Seoul Semi and Everlight in 2014, but this certainly will be the technology focus in the LED industry in the long run.**

Figure 9: LED industry technology development



Source: Philips, J.P. Morgan.

Figure 10: Theoretical cost development -Packaged LED vs. Chip Scale Package

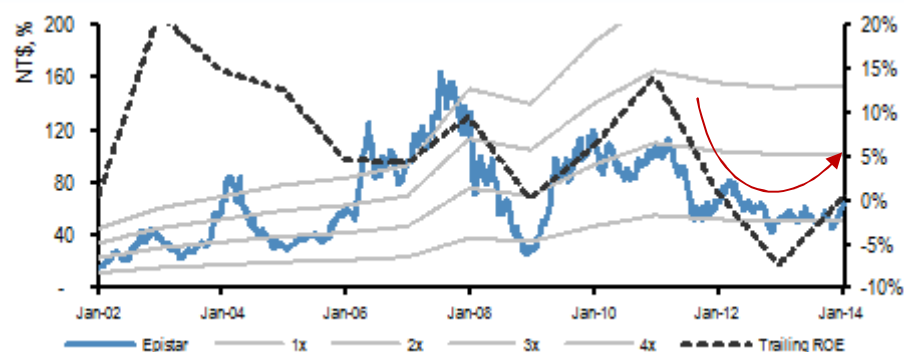


Source: Philips, J.P. Morgan.

## Valuation and share price analysis

During the previous LED TV cycle, Epistar's median trailing 12-month P/B multiple was 1.7x on a mere 4% ROE and at the peak it could reach 2.6x on 14% ROE. As we now expect the fully-diluted 2014E book value per share to be NT\$47, our Dec-14 price target would be NT\$80 (1.7x P/B on NT\$47). Of note, we estimate fully-diluted ROE would be 3.8%/6.7% for 2014/2015E.

Figure 11: 12M trailing P/BV bands



Source: Bloomberg, J.P. Morgan estimates

Table 3: Through-the-cycle ROE

	High	Median	Low	Avg.
Mobile Device Cycle (Jun01~Dec05)	21%	13%	0%	13%
Monitor/NB cycle (Jan06~Dec08)	9%	5%	0%	5%
LED TV cycle (Jan09~Dec12)	14%	4%	-7%	4%
<b>General lighting cycle (Jan13~Now)</b>	0%	-3%	-7%	-3%

Source: Bloomberg, company data, J.P. Morgan estimates.

Table 4: Through-the-cycle P/B

P/B (x)

	High	Median	Low	Avg.
Mobile Device Cycle (Jun01~Dec05)	4.8	2.1	1.3	2.3
Monitor/NB cycle (Jan06~Dec08)	5.9	3.8	0.7	3.3
LED TV cycle (Jan09~Dec12)	2.6	1.7	0.8	1.6
<b>General lighting cycle (Jan13~Now)</b>	1.3	1.1	0.9	1.1

Source: Bloomberg, company data, J.P. Morgan estimates.

Table 5: Through-the-cycle P/E

P/E (x)

	High	Median	Low	Avg.
Mobile Device Cycle (Jun01~Dec05)	393.7	23.1	10.4	30.0
Monitor/NB cycle (Jan06~Dec08)	421.0	72.6	28.0	76.5
Edge-type LED TV cycle (Jan09~Dec12)	3,327.4	20.1	- 1,059.6	35.2
<b>General lighting cycle (Jan13~Now)</b>	n.a.	n.a.	n.a.	n.a.

Source: Bloomberg, company data, J.P. Morgan estimates.



### Share price moves along with fundamental indicators

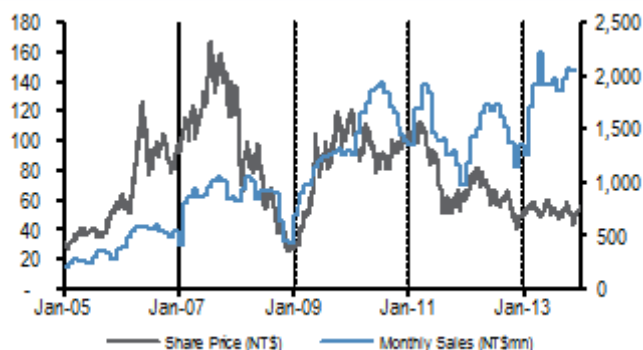
Based on the trend seen in the past few years, Epistar's share price tends to move in line with its gross margin, operating profit one quarter ahead and move along with its monthly revenue. Given that we expect demand to rise meaningfully towards the second half of 1Q14, we expect the share price to stay strong from here.

Figure 12: Monthly revenue Y/Y growth (one month ahead) vs share price trend



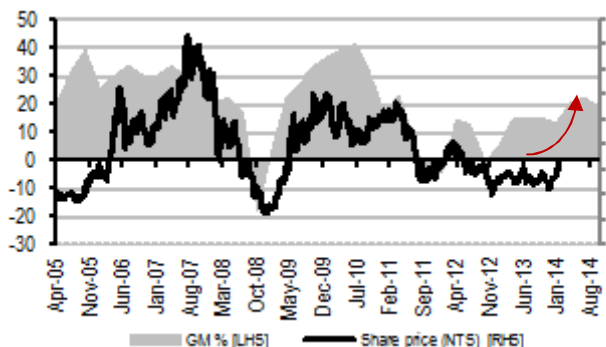
Source: Company data, TEJ, J.P. Morgan estimates.

Figure 13: Monthly revenue (one month ahead) vs share price trend



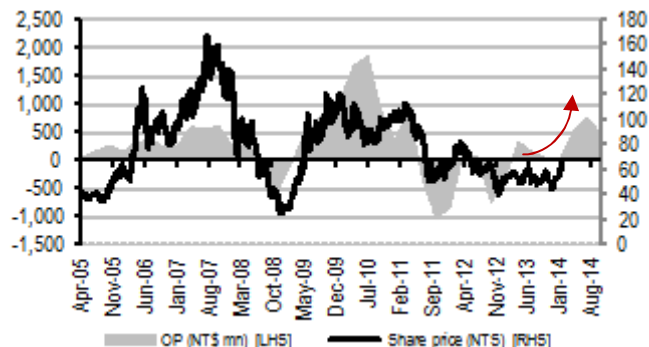
Source: Company data, TEJ, J.P. Morgan estimates.

Figure 14: Gross margins (one quarter ahead) vs share price trend



Source: Company data, TEJ, J.P. Morgan estimates.

Figure 15: Operating profit (one quarter ahead) vs share price trend



Source: Company data, TEJ, J.P. Morgan estimates.

Figure 16: Epistar: Share price and QFII holding



Source: Company data, TEJ, J.P. Morgan estimates.



Table 6: Epistar earnings model – based on consolidated result

	2013				2014E				2015E						
NT\$ MM, YE Dec.	1Q	2Q	3Q	4QE	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE	2013E	2014E	2015E
<b>Revenue</b>	<b>4,325</b>	<b>6,068</b>	<b>5,754</b>	<b>6,105</b>	<b>5,522</b>	<b>6,769</b>	<b>6,796</b>	<b>6,793</b>	<b>5,782</b>	<b>6,713</b>	<b>6,964</b>	<b>6,325</b>	<b>22,251</b>	<b>25,880</b>	<b>25,784</b>
Depreciation	-1,066	-1,067	-1,073	-1,025	-1,016	-1,002	-990	-954	-948	-891	-840	-802	-4,231	-3,962	-3,482
COGS	-4,054	-5,104	-4,828	-5,133	-4,733	-5,310	-5,212	-5,478	-4,799	-4,906	-4,875	-4,853	-19,120	-20,733	-19,433
<b>Gross Profit</b>	<b>271</b>	<b>964</b>	<b>926</b>	<b>972</b>	<b>789</b>	<b>1,459</b>	<b>1,584</b>	<b>1,315</b>	<b>983</b>	<b>1,807</b>	<b>2,089</b>	<b>1,473</b>	<b>3,132</b>	<b>5,148</b>	<b>6,351</b>
Operating Expense	-576	-577	-721	-867	-738	-889	-768	-771	-647	-751	-784	-711	-2,741	-3,166	-2,893
<b>EBIT</b>	<b>-306</b>	<b>387</b>	<b>204</b>	<b>105</b>	<b>52</b>	<b>570</b>	<b>816</b>	<b>544</b>	<b>336</b>	<b>1,056</b>	<b>1,305</b>	<b>761</b>	<b>390</b>	<b>1,982</b>	<b>3,458</b>
Non-Operating Income	41	21	-281	-67	1	13	14	5	2	16	15	7	-286	34	41
<b>Pre Tax Profit</b>	<b>-265</b>	<b>408</b>	<b>-77</b>	<b>38</b>	<b>52</b>	<b>584</b>	<b>830</b>	<b>550</b>	<b>338</b>	<b>1,072</b>	<b>1,320</b>	<b>768</b>	<b>104</b>	<b>2,016</b>	<b>3,499</b>
Tax Expense/(Credit)	-17	46	-12	2	3	35	50	33	20	64	79	46	-20	-121	-210
<b>Net Profit</b>	<b>-248</b>	<b>346</b>	<b>-83</b>	<b>36</b>	<b>49</b>	<b>549</b>	<b>781</b>	<b>517</b>	<b>318</b>	<b>1,008</b>	<b>1,241</b>	<b>722</b>	<b>84</b>	<b>1,895</b>	<b>3,289</b>
<b>EPS (NT\$)</b>	<b>-0.27</b>	<b>0.37</b>	<b>-0.09</b>	<b>0.04</b>	<b>0.05</b>	<b>0.59</b>	<b>0.84</b>	<b>0.55</b>	<b>0.34</b>	<b>1.08</b>	<b>1.33</b>	<b>0.77</b>	<b>0.09</b>	<b>2.03</b>	<b>3.52</b>
<b>Shipments (Mn)</b>															
AlGaInp ("4-element")	4,500	5,400	5,400	6,000	6,000	6,000	6,000	5,700	4,800	5,700	6,000	5,700	21,300	23,700	22,200
InGaN	9,450	13,500	13,500	13,500	12,420	14,700	14,580	15,675	14,025	16,170	16,500	15,675	49,950	57,375	62,370
<b>Revenue breakdown</b>															
Handset	8%	4%	4%	3%	3%	2%	1%	0%	0%	2%	1%	0%	5%	1%	1%
NB	13%	8%	5%	8%	8%	8%	7%	5%	5%	5%	7%	5%	8%	7%	6%
TV	30%	35%	33%	30%	30%	30%	33%	30%	30%	25%	28%	30%	32%	31%	28%
Lighting	30%	30%	40%	40%	40%	45%	50%	55%	55%	55%	55%	55%	35%	48%	55%
Regular 4-element	10%	9%	7%	8%	8%	8%	7%	8%	8%	8%	7%	8%	8%	8%	8%
Others	7%	12%	9%	9%	9%	5%	0%	0%	0%	3%	0%	0%	9%	3%	1%
<b>Margins (%)</b>															
Gross Margin	6.3	15.9	16.1	15.9	14.3	21.6	23.3	19.4	17.0	26.9	30.0	23.3	14.1	19.9	24.6
Operating Margin	-7.1	6.4	3.6	1.7	0.9	8.4	12.0	8.0	5.8	15.7	18.7	12.0	1.8	7.7	13.4
EBITDA Margin	18.6	24.6	22.9	19.1	20.0	23.7	27.1	22.5	22.8	29.5	31.2	25.2	21.5	23.5	27.4
Net Margin	-5.7	5.7	-1.4	0.6	0.9	8.1	11.5	7.6	5.5	15.0	17.8	11.4	0.4	7.3	12.8
<b>Sequential Growth (%)</b>															
Revenue	-2.7	40.3	-5.2	6.1	-9.5	22.6	0.4	0.0	-14.9	16.1	3.7	-9.2	11.6	16.3	-0.4
Gross Profit	1,535.3	256.1	-4.0	5.0	-18.7	84.8	8.5	-17.0	-25.3	83.9	15.6	-29.5	113.7	64.4	23.4
EBIT	56.5	226.6	-47.2	-48.8	-50.7	1,005.1	43.1	-33.3	-38.3	214.3	23.6	-41.7	132.4	407.8	74.5
Net Profit (reported)	77.6	239.4	-124.1	142.6	37.9	1,019.4	42.3	-33.8	-38.5	217.3	23.2	-41.8	102.4	2,162.6	73.6

Source: Company data, J.P. Morgan estimates.

## Investment Thesis, Valuation and Risks

### Epistar (*Overweight; Price Target: NT\$80.00*)

#### Investment Thesis

Despite the lackluster LED BLU demand, driven by weak TV/PC markets, LED stocks in general have shown meaningful outperformance during 2013 as LED lighting demand surges. Looking ahead to 2014, we expect LED lighting demand to show further meaningful growth and to overtake LED BLU to become the biggest demand driver for the sector.

1. **LED adoption is going mainstream:** Current LED lamps (e.g., A19, PAR38) yield payback in less than one year for commercial users. LED lighting's unit growth should exceed 70% in 2014 owing to ongoing decline in the cost of manufacturing. We believe the consumer market will grow fast as LED A-lamps, now retailing at under \$10, replace incandescent bulbs. Upcoming bans on incandescent bulbs by various countries could serve as an additional catalyst.
2. **Structural change in LED sector:** Contrary to a heavily concentrated LED BLU market, the general lighting market is fragmented with the global top three brands (i.e. Philips, Osram, GE) in aggregate representing less than 30% of the global market share. We believe this will give more room for LED component makers to enjoy stable profit margins than what they used to earn during the time LED BLU dominated.
3. **Supply/demand to improve:** We expect demand for MOCVDs to surge in mid-2014, mainly because available LED production capacity is exhausted for Tier-1 chipmakers, but also because 2009 vintage machines will be replaced, owing to the introduction of next-generation equipment yielding a major increase in throughput. Chip capacity could grow 12% in 2014 but this remains well below 22% LED chip demand growth, implying oversupply in chips may return to balance after mid-2014, in our view. Epistar, as the largest chip foundry in the world, will benefit strongly from supply tightness on high-spec chips.

#### Valuation

Our Dec-14 price target to NT\$80, based on 1.7x FY14E P/B on a fully-diluted basis (median P/B from the previous LED TV cycle).

#### Risks to Rating and Price Target

**Key downside risks:** 1) weaker-than-expected LED TV demand; 2) slower-than-expected LED lighting adoption; 3) increasing vertical integration from panel makers; and 4) a sudden increase in LED chip supply from competitors.

## Epistar: Summary of Financials

Income Statement					Ratio Analysis				
NT\$ in millions, year end Dec	FY12	FY13E	FY14E	FY15E	NT\$ in millions, year end Dec	FY12	FY13E	FY14E	FY15E
Revenues	19,931	22,251	25,880	25,784	Gross margin	7.4%	14.1%	19.9%	24.6%
Cost of goods sold	(18,466)	(19,120)	(20,733)	(19,433)	EBITDA margin	16.5%	21.5%	23.5%	27.4%
Gross Profit	1,466	3,132	5,148	6,351	Operating margin	(6.0%)	1.8%	7.7%	13.4%
R&D expenses	(1,036)	(1,341)	(1,513)	(1,238)	Net margin	(17.8%)	0.4%	7.3%	12.8%
SG&A expenses	(1,633)	(1,400)	(1,653)	(1,656)	R&D/sales	5.2%	6.0%	5.8%	4.8%
Operating profit (EBIT)	(1,203)	390	1,982	3,458	SG&A/Sales	8.2%	6.3%	6.4%	6.4%
EBITDA	3,287	4,778	6,084	7,063	Sales growth	(9.3%)	11.6%	16.3%	(0.4%)
Interest income	170	142	93	102	Operating profit growth	(5385.0%)	(132.4%)	407.8%	74.5%
Interest expense	(364)	(153)	(109)	(112)	Net profit growth	236.6%	(102.4%)	2162.6%	73.6%
Investment income (Exp.)	(195)	(12)	(16)	(9)	EPS (reported) growth	234.2%	(102.2%)	2160.4%	73.6%
Non-operating Income (expense)	(593)	(236)	0	0	Interest coverage (x)	16.9	411.1	371.7	748.2
Earnings before tax	(2,184)	104	2,016	3,499	Net debt to total capital	0.4%	4.8%	3.8%	(0.5%)
Tax	(146)	(20)	(121)	(210)	Net debt to equity	0.4%	5.1%	3.9%	(0.5%)
Net income (reported)	(3,543)	84	1,895	3,289	Asset turnover	0.3	0.3	0.4	0.4
Net income (adjusted)	(3,543)	84	1,895	3,289	Working capital turns (x)	1.0	1.2	1.4	1.3
EPS (reported)	(4.12)	0.09	2.03	3.52	ROE	(7.2%)	0.2%	3.9%	6.5%
EPS (adjusted)	(4.12)	0.09	2.03	3.52	ROIC	(5.4%)	0.2%	3.2%	5.3%
BVPS	50.60	50.88	52.91	55.53					
DPS	0.00	0.00	0.00	0.90					
Shares outstanding	860	933	933	933					
Balance sheet					Cash flow statement				
NT\$ in millions, year end Dec	FY12	FY13E	FY14E	FY15E	NT\$ in millions, year end Dec	FY12	FY13E	FY14E	FY15E
Cash and cash equivalents	12,143	8,397	9,167	11,425	Net income	(3,543)	84	1,895	3,289
Accounts receivable	8,612	11,377	12,659	11,788	Depr. & amortization	4,490	4,387	4,102	3,604
Inventories	4,321	5,253	5,845	5,443	Change in working capital	(2,088)	(2,965)	(1,361)	597
Others	2,334	2,796	3,000	2,775	Other	1,213	0	0	0
Current assets	27,410	27,822	30,671	31,431	Cash flow from operations	72	1,506	4,635	7,490
LT investments	4,546	4,884	4,934	4,984	Capex	(2,942)	(2,931)	(4,000)	(4,500)
Net fixed assets	28,662	28,149	28,187	29,205	Disposal/(purchase)	-	-	-	-
Others	6,399	6,426	6,459	6,469	Cash flow from investing	(2,537)	(4,240)	(4,222)	(4,682)
Total Assets	67,017	67,281	70,251	72,088	Free cash flow	(2,662)	(1,416)	650	2,999
Liabilities					Equity raised/(repaid)	0	0	0	0
ST Loans	2,586	2,573	2,647	2,660	Debt raised/(repaid)	(2,266)	(1,542)	311	54
Payables	2,439	2,702	2,975	2,664	Other	(851)	530	46	7
Others	3,793	4,723	5,167	4,801	Dividends paid	0	0	0	(836)
Total current liabilities	8,817	9,998	10,789	10,125	Cash flow from financing	(3,117)	(1,012)	358	(774)
Long-term debt	9,763	8,234	8,471	8,512	Net change in cash	(5,582)	(3,746)	770	2,033
Other liabilities	1,288	1,558	1,604	1,612	Beginning cash	17,725	12,143	8,397	9,167
Total Liabilities	19,868	19,789	20,864	20,248	Ending cash	12,143	8,397	9,167	11,200
Shareholder's equity	47,149	47,492	49,387	51,840					

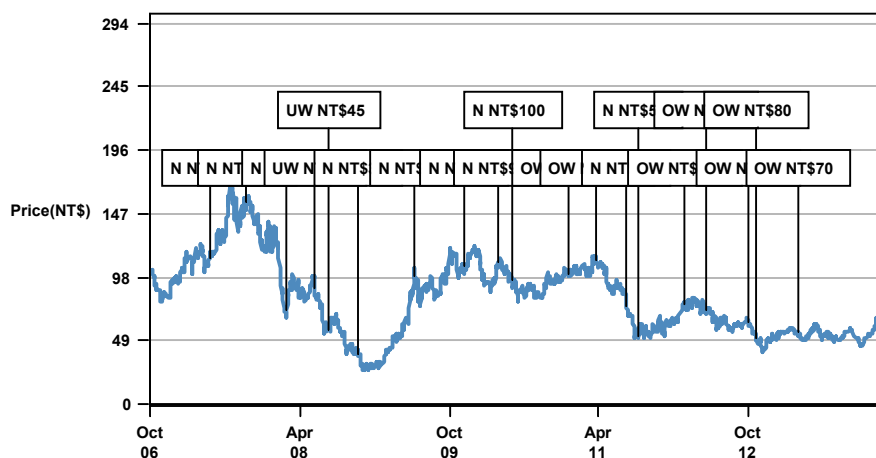
Source: Company data and J.P. Morgan estimates

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Epistar (2448.TW, 2448 TT) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.  
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