

Himax Technologies, Inc.

(HIMX.OQ / HIMX US)

RESULTS

Rating	OUTPERFORM* [V]
Price (12 Nov 15, US\$)	6.11
Target price (US\$)	(from 8.20) 8.401
Upside/downside (%)	37.5
Mkt cap (US\$ mn)	1,042 (US\$ 1,042)
Enterprise value (US\$ mn)	1,114
Number of shares (mn)	170.52
Free float (%)	70.0
52-week price range	9.26 - 5.90
ADTO - 6M (US\$ mn)	3.9

^{*}Stock ratings are relative to the coverage universe in each analyst's or each team's respective sector.

Research Analysts

Jerry Su

886 2 2715 6361 jerry.su@credit-suisse.com

derrick.yang@credit-suisse.com

886 2 2715 6367

4Q and 2016 revenue growth driven by China customer ramp

- 3Q15 in-line, 4Q15 guidance better: Himax's 3Q15 GAAP EPS of 1 cent loss was in-line with our estimate and at the lower-end of its guidance. However, 4Q15 sales is guided to be flat to up 5% QoQ, ahead of our/Street estimates of QoQ decline and is also better than its peers. 4Q15 GM is guided to improve slightly QoQ and GAAP EPS is guided at 1-3 cents.
- China panel capacity ramp to drive large DDI growth: Himax's large DDI is seeing a better momentum than its peers given the aggressive capacity expansion by the Chinese panel makers, where Himax has higher allocation vs that of its Taiwanese customers (AUO and INX). We believe Himax's large size driver IC business will be the main growth driver for the company (we estimate up 16% YoY in 2016) on China capacity ramp and 4K2K proliferation, while its GM might face some pressure amid the TFT down cycle but should be offset by cost reduction and new designs.
- LCOS/WLO started pilot production: Himax has begun pilot production of its LCOS/WLO since Sep 2015 and expects volume to pick up in 4Q with mass production to take place in 1Q16. We expect LCOS/WLO to contribute more sales/profit from 2H16-2017 as we believe it also won back a major Head Mount project from its customer.
- Maintain OUTPERFORM, raise TP to US\$8.40: We fine tune our model and raise our 2015 EPS by 10% and leave our 2016-17E EPS largely unchanged. We raise our TP to US\$8.40 (from \$8.20) as we update our DCF model, implying 21x 2017E P/E. We reiterate our OUTPERFORM rating on the stock as the China TFT fab expansions, TDDI/AMOLED opportunity, and the LCOS/WLO ramp should support its growth in 2016-17.

Chare price perfermance	
Price (LHS) —— Rebased Rel (RHS)	200 + 150 + 100
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Share price performance

The price relative chart measures performance against the S&P 500 INDEX which closed at 2075, on 11/11/15 On 11/11/15 the spot exchange rate was US\$1./US\$1

Performance over	1M	3M	12M	
Absolute (%)	-9.9	-10.3	-15.4	
Relative (%)	-10.6	-6.4	-13.7	_

Financial and valuation metrics				
Year	12/14A	12/15E	12/16E	12/17E
Revenue (US\$ mn)	840.5	682.6	793.9	938.7
EBITDA (US\$ mn)	87.3	40.2	65.1	101.9
EBIT (US\$ mn)	72.7	25.9	49.9	84.9
Net profit (US\$ mn)	66.6	21.9	41.2	67.3
EPS (CS adj.) (US\$)	0.39	0.13	0.24	0.39
Change from previous EPS (%)	n.a.	10.5	0.7	1.0
Consensus EPS (US\$)	n.a.	0.16	0.27	0.41
EPS growth (%)	8.2	-67.1	88.0	63.5
P/E (x)	15.8	48.0	25.5	15.6
Dividend yield (%)	4.9	1.7	3.1	5.1
EV/EBITDA (x)	11.3	27.7	16.7	10.5
P/B (x)	2.2	2.4	2.3	2.1
ROE (%)	14.1	4.7	9.1	14.0
Net debt/equity (%)	Net cash	16.3	9.5	5.4

Source: Company data, Thomson Reuters, Credit Suisse estimates.

DISCLOSURE APPENDIX AT THE BACK OF THIS REPORT CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, AND THE STATUS OF NON-US ANALYSTS. US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

¹Target price is for 12 months.

[[]V] = Stock considered volatile (see Disclosure Appendix).



Himax Technologies HIMX.OQ/HIMX US Price (12 Nov 15): US\$6.11, Rating:: OUTPERFORM [V], Target Price: US\$8.40, Analyst: Jerry Su

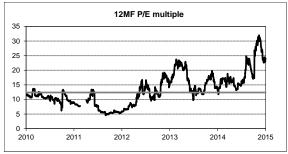
TP	%Up/Dwn	Assumptions	
10.00	63.67	25x 2017 P/E	
8.40	37.48	21x 2017 P/E	
4.00	(34.53)	10x 2017 P/E	
	10.00 8.40	10.00 63.67 8.40 37.48	10.00 63.67 25x 2017 P/E 8.40 37.48 21x 2017 P/E

Central Case	8.40 37.48	21x 2017 P/E		
Downside	4.00 (34.53)	10x 2017 P/E		
Income eteter	10// 14	40/455	40/405	401475
Income statement (US\$ mn) 12/14A 840.5		12/16E	12/17E
Sales revenue Cost of goods sold	634.7		793.9 605.9	938.7 706.8
SG&A	38.0		35.0	39.2
Other operating exp./(inc.)	80.5		87.9	90.8
EBITDA	87.3		65.1	101.9
Depreciation & amortisation	14.6		15.2	17.1
EBIT	72.7		49.9	84.9
Net interest expense/(inc.)	(0.21)	(0.12)	0.15	0.16
Non-operating inc./(exp.)	12.6	2.2	1.7	2.0
Associates/JV	_	_	_	_
Recurring PBT	85.5	28.3	51.5	86.7
Exceptionals/extraordinaries	_		_	_
Taxes	21.6		12.6	20.8
Profit after tax	63.9	18.2	38.9	65.9
Other after tax income		·		
Minority interests	(2.7)	(3.7)	(2.3)	(1.4
Preferred dividends				-
Reported net profit	66.6	21.9	41.2	67.3
Analyst adjustments	-			-
Net profit (Credit Suisse)	66.6		41.2	67.3
Cash flow (US\$ mn)	12/14A		12/16E	12/17E
EBIT	72.7	25.9	49.9	84.9
Net interest	_	_	_	_
Tax paid		(0.4.5)		- // 0
Working capital	15.1		13.9	(4.2
Other cash & non-cash items Operating cash flow	5.8 93.7		4.6 68.5	(1.4 79. :
Capex		, ,	(25.0)	(30.0
Free cash flow to the firm	(10.9) 82.8		43.5	49.
Disposals of fixed assets	02.0	(9.0)	43.3	43
Acquisitions		_		
Divestments	0.000	0.010	_	_
Associate investments	0.000		_	_
Other investment/(outflows)	21.6	(19.9)	(0.5)	(0.5
Investing cash flow	10.6		(25.5)	(30.5
Equity raised	_		((00.0
Dividends paid	(46.0)	(51.4)	(17.5)	(32.9
Net borrowings	(393.0)		` _	` -
Other financing cash flow	392.8	270.4	2.3	1.4
Financing cash flow	(46.2)	(51.0)	(15.3)	(31.5
Total cash flow	58.2	(79.9)	27.7	17.3
Adjustments	(0.01)	(0.12)	_	_
Net change in cash	58.1	(80.0)	27.7	17.3
Balance sheet (US\$ mn)	12/14A	12/15E	12/16E	12/17
Cash & cash equivalents	185.5	107.9	135.6	152.9
Current receivables	219.4		245.3	250.4
Inventories	166.1	180.6	145.5	148.
Other current assets	158.6	228.3	240.6	241.4
Current assets	729.6	688.0	767.0	793.
Property, plant & equip.	57.3	53.2	63.0	76.
Investments	11.3		14.6	14.0
Intangibles	34.8	35.4	35.4	35.4
Other non-current assets	-	·		
Total assets	833.0		880.1	919.
Accounts payable	179.3		157.3	160.
Short-term debt	130.0	180.0	180.0	180.
Current provisions				-
Other current liabilities	46.1		72.1	73.
Current liabilities	355.4	344.1	409.3	414.
Long-term debt	_	_	_	_
Non-current provisions		4.4	_	
Other non-current liab.	5.6		4.4	4.
Total liabilities	361.0		413.7	418.
Shareholders' equity	483.1		463.9	498.
Minority interests	(0.7)		2.4	2.4
Total liabilities & equity	833.0	791.2	880.1	919.:

Key earnings drivers	12/14A	12/15E	12/16E	12/17E
Large size driver IC	226.1	224.3	266.0	307.2
S/M size driver Ic	445.9	331.7	351.9	370.9
Non driver products	168.5	126.6	176.0	260.6
· ·	_	_	_	_

Per share data	12/14A	12/15E	12/16E	12/17E
Shares (wtd avg.) (mn)	172.1	172.1	171.9	171.9
EPS (Credit Suisse)	0.39	0.13	0.24	0.39
DPS (US\$)	0.30	0.10	0.19	0.31
BVPS (US\$)	2.81	2.56	2.70	2.90
Operating CFPS (US\$)	0.54	(0.01)	0.40	0.46
Key ratios and	12/14A	12/15E	12/16E	12/17E
valuation				
Growth(%)				
Sales revenue	9.1	(18.8)	16.3	18.2
EBIT	(2.2)	(64.3)	92.5	69.9
Net profit	8.3	(67.1)	87.8	63.5
EPS	8.2	(67.1)	88.0	63.5
Margins (%)				
EBITDA	10.4	5.9	8.2	10.9
EBIT	8.7	3.8	6.3	9.0
Pre-tax profit	10.2	4.1	6.5	9.2
Net profit	7.92	3.21	5.19	7.17
Valuation metrics (x)				
P/E	15.8	48.0	25.5	15.6
P/B	2.18	2.39	2.26	2.11
Dividend yield (%)	4.94	1.67	3.13	5.13
P/CF	11	(660)	15	13
EV/sales	1.17	1.63	1.37	1.14
EV/EBITDA	11.3	27.7	16.7	10.5
EV/EBIT	13.6	42.9	21.8	12.6
ROE analysis (%)				
ROE	14.1	4.7	9.1	14.0
ROIC	12.8	3.6	7.4	12.4
Asset turnover (x)	1.01	0.86	0.90	1.02
Interest burden (x)	1.18	1.09	1.03	1.02
Tax burden (x)	0.75	0.64	0.76	0.76
Financial leverage (x)	1.76	1.79	1.89	1.84
Credit ratios				
Net debt/equity (%)	(11.8)	16.3	9.5	5.4
Net debt/EBITDA (x)	(0.64)	1.79	0.68	0.27
Interest cover (x)	(346)	(224)	325	525

Source: Company data, Thomson Reuters, Credit Suisse estimates.





Source: IBES



4Q and 2016 revenue growth driven by China customer ramp

Himax remains upbeat on its long-term business outlook and guided 4Q15 sales ahead of expectations. Its large driver IC business is seeing a better momentum than its peers, thanks to the aggressive capacity expansion by the Chinese panel makers (BOE, CSOT, CEC-Panda, see Figure 3), where Himax has higher allocation vs that of its Taiwanese customers (AUO and INX).

Figure 1: Himax's 4Q15 revenue guidance better than panel makers and peers

	Himax	Novatek	AUO	Innolux
4Q15	Sales: up 0-5% QoQ	Sales: both large and	Large-size panel shipment: down	Large-size panel shipment: down
guidance		smartphone DDI revenue	high single digit to low teens QoQ	high single digit QoQ
		flat to slightly down QoQ	Small size panel shipment: down	Small size panel shipment: down
			double digit QoQ	high single digit QoQ

Source: Company data, Credit Suisse

We hold our view that display panel makers are accelerating the resolution shift amid the downcycle for better profitability, which is positive for the driver IC supply chain. We also think the pricing pressure to Himax's GM is a near-term impact and its GM should return to a more normalized level in 1-2 quarters as the cost reduction and new design efforts kick in. Longer-term, we believe the ramp into TDDI, OLED driver IC, and LCOS/WLO take off should help to bring the corp GM back to 24-25% level.

For small/medium size, its smartphone business for the Korean customer (i.e., Samsung) is in a transitional period as its customer decided to push more AMOLED panels to the market, rather than TFT. Nevertheless, the recovery of its Chinese smartphone customers and the resolution upgrade are offsetting the weakness at Samsung. For other small/mid applications, it sees better 10"+ tablet demand, as well as automotive applications for navigation, central display, and smart rear-view mirrors from 2016.

Management remains optimistic on its LCOS/WLO business and sees augmented reality (AR) as one of the few disruptive technologies for its brand customers. Over the past 15 years, Himax said it has invested over \$100 mn in LCOS and WLO (~\$15mn in 2015) and the these business hit the inflection point in September with pilot production shipment made to a major customer (we think it's Microsoft). Himax said it will continue to expand its capacity based on customer demand, and our checks indicated that Himax has won back a major Head Mount project from its customer for 2H16-17 ramp.

It also noted that its on-cell touch business has received several design-wins and entered mass production at multiple major end customers, and expects on-cell touch sales to further grow in 2016. Management also said its in-cell TDDI is starting some small volume shipment in 4Q (we think for Chinese panel makers), and it believes in-cell TDDI will contribute more revenue from 2H16, where competition could be less as weaker players are unable to catch up.

In short, we believe Himax's large size driver IC business will be the main growth driver for the company (we estimate up 16% YoY in 2016) on China capacity ramp and 4K2K proliferation, while its GM might face some pressure amid the TFT down cycle but should be offset by product cost reduction and new designs. For S/M size, we think the weakness for its Korean customer should be offset by the new opportunities in China, resolution upgrade, and recovery of tablet and automotive applications. Non-driver IC revenue should see a stronger rebound, led by the mass production of LCOS/WLO from 1H16 and touch ICs (on-cell and TDDI).

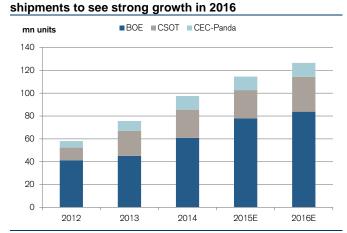
We fine tune our model and raise our 2015E EPS by 10% and leave our 2016-17E EPS largely unchanged. We raise our TP to US\$8.40 as we update our DCF model, implying 21x 2017E P/E. We reiterate our OUTPERFORM rating on the stock as the China TFT fab

GM weakness for large DDI is only a near-term impact



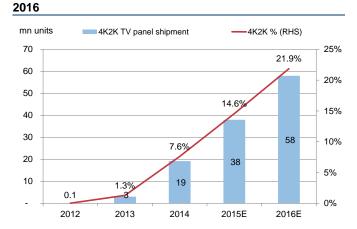
expansions, TDDI/AMOLED opportunity, and the LCOS/WLO ramp should support its growth in 2016-17.

Figure 2: Chinese panel makers (BOE and CSOT)



Source: DisplaySearch, Credit Suisse estimates

Figure 3: 4K2K TV panel proliferation to continue into



Source: DisplaySearch, Credit Suisse estimates

Figure 4: Aggressive ramp of large-sized TFT LCD fab in China in 2015-18E

Figure 4	⊩ Aggre	essive ramp of large-s	sized TFT LCD fab in	China in 2015-18E		
Company	2013	2014	2015	2016	2017	2018
BOE	Hefei Gen	6 90K substrates/month -> 105K/m	onth (10K: Oxide TFT)			
	Beijing Ge	n 8.5 120K/month -> 135K/month				
		Hefei Gen 8.5 30K/month -> 70K/r	month (4K for white OLED) -> 100K/	month		
		Gen 5.5 (I	LTPS & OLED) 30K/month -> 25K/mo	onth -> 58K/month		
			Chongqing Gen 8.	5 60K/month - > 90K/month -> 120H	(/month	
					Fuzhou Gen 8.5 50K -> 1	1 20K/month =>140-150K/mth
						Hefei Gen 10.5 90K/mth
CSOT	Shenzhen (Gen 8.5 120K substrates/month -> 1	45K/month			
			Shenzhen Gen 8.5	100K/month		
CEC-Panda						
CEC i unuu	Nanjing Ge	n 6 83K/month				
			Nanjing Gen 8.5 30	K/m -> 60K/m -> 90K/m -> 120K/m		
НКС					Chengdu Gen 8 60K/mon	th
Samsung	3	Suzhou Gen 8.5 65K/month -> 130K/	month 'month			
LGD		Guanzhou G	Gen 8.5 90K/month -> 120K/month			
AUO						
			Gen 8.5 60K/month ->	80-90K/month		
Innolux			0. 0.5/0.6.5311	11 . 1001/		
			Gen 8.5/8.6 60K/mon	th -> 100K/month		
		Ge	n 6 350K/month -> 400K/month			
					l .	l

Source: Company data, Credit Suisse estimates

4Q15 sales guidance ahead of panel makers and peers on share gain for large DDI

(1) 4Q15 revenue guidance ahead of the industry. 4Q15 revenue guidance of flat to up 5% QoQ is better than our 5% QoQ decline estimate and industry trend of 5-10% QoQ decline. Himax expects small/medium panel driver sales to be down high-single digit QoQ on weak demand from Korean smartphone customer, offset by better demand from Chinese smartphone customers, resolution migration to HD-above, and stabilizing tablet demand in China. Non-driver sales is also guided to decline mid-single digit QoQ on continue weakness for CMOS sensor, offset by ramp of touch IC and LCOS/WLO. For

Large size DDI sales to grow 20%+ QoQ



large size driver IC, it guided sales to grow double digit QoQ (we estimate up 20%+ QoQ) as it enjoys the capacity ramp up by its Chinese customers, although there are some pricing pressure.

Himax's revenue guidance of flat to up 5% QoQ is ahead of its peers and Taiwanese panel makers, and we believe it is due to share gain in China and 4K2K TV proliferation. Our supply chain checks suggest China smartphone component pull-in is recovering in 4Q on new model launches, especially the new iPhone demand seems lukewarm. We are also seeing some rush order in 4Q, mainly from IT and smartphone related, which could lead to some upside potential for 4Q sales.

- (2) 4Q15 GM to be flat to up slightly on higher NRE incomes, offset by pricing pressure for large DDI. 4Q15 GM is guided to be flat to up slightly QoQ and GAAP EPS to be in the range of \$0.01-\$0.03, as the unfavourable revenue mix from more large size DDI and pricing pressure are offset by higher NRE income. Full year OPEX is guided to flat YoY, suggesting 4Q OPEX/sales of less than 20%.
- (3) Large size panel IC growth driven by TV. Himax expects 4Q large size driver IC sales to grow double digit QoQ (we estimate 20%+) driven by better TV DDI shipments to Chinese panel makers. It also sees better momentum for NB and monitor as demand has recovered. Longer-term, it believe the 4K2K proliferation and the new capacity from China should support its large size driver IC revenue growth since it has higher share among the Chinese panel customers vs that of the Taiwanese customers.
- (4) Small and medium size revenue to decline high-single digit QoQ in 4Q15. Himax expects China smartphone demand to recover in 4Q, although the business with its Korean smartphone customer (i.e., Samsung) remains soft on customer's share loss and delay ramp of AMOLED, despite it already pass the AMOLED technological qualification. It continues to see an acceleration of resolution upgrade from WVGA/qHD to HD/FHD since 3Q15, and believes it is well position to capture the LTPS and OLED production capacity ramp in China from 2016-beyond. We also believe it has won the flagship model of Xiaomi and should start mass production in the next few quarters.

Figure 5: There will also be multiple Chinese LTPS fab to ramp in 2015-18E

	THEIC WIII 4130 I	oc manipic omi	CSC ETT O TAB TO	ramp in 2015-16	<u>'</u>
Company	2014	2015	2016	2017	2018
BOE	Gen 5.5	(LTPS & OLED) 30K/mor	nth -> 25K/month -> 35k	/month	
			Chengo	du Gen 6 (LTPS) 30K/mo	nth
CSOT			Wuhar	Gen 6 (LTPS) 30K/mont	:h
AUO			Kunsha	in Gen 6 (LTPS) 25K/moi	nth
Innolux / Foxconn			Kaohsiung Gen 6	(LTPS) 24K/month	
				Zł	nengzhou Gen 6 (LTPS)
Tianma	Xiamen Gen 5.5 (LTP:	S) 15K/month LTPS + 15	K/month OLED		
			Shanghai (Gen 5.5 (LTPS) 15K/mon	th (30K in 2017?)
				Xiamen Gen 6 (LTPS) 30	DK/mth
				Wuhan Gen 6 (LTPS) 30	DK/mth
Truly			Huizhou	Gen 4 (LTPS) 25K/montl	1
Visionnox		Kunshan	Gen 5.5 (LTPS) 8K/mont	h	
EDO		Gen 4 (LTPS) 15K/mo	nth		
JDI			Haku	san Gen 6 (LTPS) 25K/m	l onth

Source: Company data, Credit Suisse estimates

4Q15 GM help by NRE



(5) Non-driver declining by mid-single digit QoQ in 3Q15. Himax guided its non-driver revenues to decline high-single digit QoQ in 4Q15, though it maintains its positive view on the opportunities in 2016.

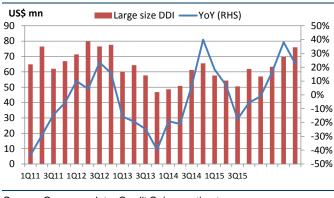
Non-driver revenue to be down by mid-single digit QoQ in 4Q15

Its CMOS image sensor sales has been suffering from weak low end smartphone demand in China, which is the main target market for its 2MP/5MP sensor, and the slower traction in the 8MP/13MP sensors due to the lack of the Phase Detection Auto Focus (PDAF) function that was popular among high end smartphones. Though Himax is catching up fast and believes it will be one of the few players capable of providing PDAF-equipped CMOS image sensors in the very near future.

For the touch controller business, it expect the on cell shipment to continue growing beyond 2015 and is also optimistic about its TDDI solutions for pure in-cell touch, as it has been working with almost all leading panel makers for joint development and should see more significant contribution beyond 2H16.

For the LCOS business, Himax said it continues to work with industry leaders (we think they are Google and MSFT), and has also been working with various other customers for head-mount displays. Management indicated that the company has started the pilot production of the LCOS and WLO for a major customer but also commented that it will only see mass volume when its customers successfully commercialize their new products. Management believes that augmented reality (AR) could see opportunities in the enterprise/industrial space in the early stage, before turning more popular in the consumer market. It also noted that its current capacity if 200-300K/mth are considered tight to fulfil its customers' demand forecast for 2016.

Figure 6: Large size DDI growth to resume in 4Q15



Source: Company data, Credit Suisse estimates

Figure 7: Non-driver IC sales declined in 2015 but is set to rebound in 2016



Source: Company data

3Q15 results slightly better our estimate

Himax reported 3Q15 LPS of \$0.014 (net loss of \$2.3 mn), better than our estimate and the consensus. 3Q15 revenue of \$165.6 mn was down 2% QoQ versus guidance of down 5-9% QoQ, while GM of 21.8% (down 2 pp QoQ) below than guidance of down 1.5 pp due to pricing pressure and lower NRE. 3Q15 OPM of -1.5% declined by 6.7 pp QoQ as the opex ratio went up to 23.3% (from 18.6% in 2Q15) on higher RSU expense of US\$4.5 mn. 3Q15 LPS of US\$0.014 came in slightly better than our estimate of US\$0.0015 and met guidance of US\$0.009-0.015.

3Q15 EPS slightly better than CS E



Figure 8: Himax's 3Q15 results in-line with CS but slight above consensus estimates

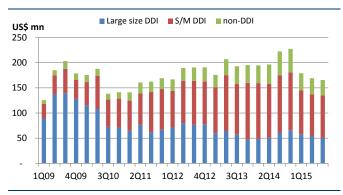
US\$ mn	3Q15	2Q15	QoQ %	3Q14	YoY %	CS 3Q old	Diff.%	Street	Diff.%
Sales	165.6	169.2	(2)	222.3	(26)	162.7	2	156.9	6
Gross profit	36.1	40.3	(10)	54.4	(34)	35.3	2	34.7	4
Operating profit	(2.5)	8.9	NM	12.6	NM	(3.3)	NM	1.6	NM
Net income	(2.3)	8.8	NM	11.1	NM	(2.6)	NM	(3.1)	NM
EPS (US\$)	(0.014)	0.051	NM	0.065	NM	(0.015)	NM	(0.024)	NM
Gross margin %	21.8	23.8		24.5		21.7		22.1	
Op margin %	(1.5)	5.2		5.6		(2.0)		1.0	
Net margin %	(1.4)	5.2		5.0		(1.6)		(1.9)	

Source: Company data, the BLOOMBERG PROFESSIONAL™ service, Credit Suisse estimates

3Q15 operational insights

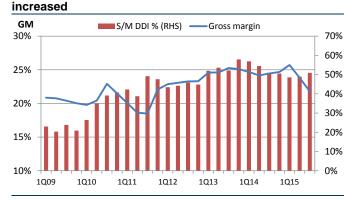
- (1) 3Q15 large size driver IC of US\$50.5 mn (30.5% of sales), down 6.9% QoQ, reflecting the slowdown in NB/monitor demand, partially offset by its share gains at the Chinese panel makers and increasing 4K2K TV panel build in China.
- (2) S/M size driver IC sales arrived at US\$84.3 mn (50.9% of sales), up 1.8% QoQ, as the increasing revenues from the Korean customers outweighed the weakness from Chinese smartphone OEMs.
- (3) Non-driver IC revenue decreased 4.2% QoQ and down 35.6% YoY to US\$30.8 mn (18.6% of sales), mostly due to the falling CMOS image sensor business, where its 2MP/5MP sensors were suffering from weak low end smartphone demand, while the 8Mp/13MP ramp was catching up slower than planned.
- (4) 3Q15 GM of 21.8% contracted 2 pp QoQ and 2.7 pp YoY, as the severe pricing pressure offset the contribution from cost reductions and NRE incomes.
- (5) OPEX of US\$38.5 mn was up 22.6% QoQ but down 7.8% YoY. The sequential increase was due to higher RSU expense. Himax vested US\$4.5 mn out of a total of US\$5 mn in 4Q15 vs US\$9.3 mn out of a total of US\$15.1 mn in 3Q14.
- (6) Non-op income of \$0.682 mn mainly due to forex gain of US\$0.680 mn offset by interest expense of US\$0.152 mn.
- (7) 3Q15 inventory of US\$177.7 mn was down 6.3% QoQ, as the company has focusing on lowering the inventories in 3Q15.
- (8) 3Q15 capex of US\$2.6 mn, up from US\$2.1 mn in 2Q15 and up from US\$2.1 mn in 3Q14. The capex for3Q15 is mainly for the expansion of the clean room facilities for its WLO products and purchasing of LCOS manufacturing equipment.

Figure 9: Himax sales breakdown by quarter



Source: Company data

Figure 10: Himax 3Q15 GM decline due to pricing pressure for large size DDI, despite S/M DDI sales



Source: Company data



Maintain OUTPERFORM, raise TP to US\$8.40

We hold our view that display panel makers are accelerating the resolution shift amid the downcycle for better profitability, which is positive for the driver IC supply chain. We believe Himax's large size driver IC business will be the main growth driver for the company (we estimate up 16% YoY in 2016) on China capacity ramp and 4K2K proliferation, while its GM might face some pressure amid the TFT down cycle but should be offset by product cost reduction and new designs. For S/M size, we think the weakness for its Korean customer should be offset by the new opportunities in China, resolution upgrade, and recovery of tablet and automotive applications. Non-driver IC revenue should see a stronger rebound, led by the mass production of LCOS/WLO from 1H16 and touch ICs (on-cell and TDDI).

Resolution upgrade is accelerating amid TFT down-cycle

We fine tune our model and raise our 2015E EPS by 10% and leave our 2016-17E EPS largely unchanged. We raise our TP to US\$8.40 as we update our DCF model, implying 21x 2017E P/E. We reiterate our OUTPERFORM rating on the stock as the China TFT fab expansions, TDDI/AMOLED opportunity, and the LCOS/WLO ramp should support its growth in 2016-17.

Figure 11: Himax DCF model

i iguie i i. i iiiiax	DCI III	ouei													
Fiscal Year	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	Terminal Value
EBIT	74	73	26	50	85	107	123	138	148	155	164	171	177	182	
Operating tax expense	19.2	18.4	9.2	12.2	20.4	26.4	30.5	34.3	36.6	38.4	40.6	42.4	43.8	45.2	
Tax rate	25.8%	25.3%	35.6%	24.5%	24.0%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%	24.8%	
NOPAT	55.1	54.4	16.7	37.7	64.5	80.2	92.5	104.1	110.9	116.5	123.2	128.4	132.9	136.9	
D&A	14.3	14.6	14.3	15.2	17.1	18.7	20.3	21.8	24.3	26.7	26.7	26.7	26.7	26.7	
Capex		11	7	25	30	20	10	10	10	10	10	10	10	10	
Free cash flow (FCF)		58.0	23.6	27.9	51.6	78.9	102.8	116.0	125.2	133.2	139.8	145.1	149.6	153.6	2,248
FCF growth YoY			-59%	18%	85%	53%	30%	13%	8%	6%	5%	4%	3%	3%	
PV of FCF			18.6	23.0	38.7	53.8	63.7	65.3	64.1	62.0	59.1	55.8	52.2	48.7	713

Discount Rate	3Q15A
Share O/S (mn)	171.9
Price per share	6.11
Marketcap	1,051
Beta	1
10-yr risk free rate	3.5%
Equity risk premium	8.0%
Cost of equity	11.5%
Total Debt	180
Cost of debt	2.0%
Tax rate	25%
After-tax cost of debt	1.5%
WACC	10.0%

Valuation	
Sum of FCF, excl. terminal value	605
PV of terminal value	713
Enterprise value	1,319
- Debt	180
+ Cash	306
Equity value	1,445
# shares outstanding	171.9
Equity value/share	8.40

Long-term sustainable growth rate

Source: Company data, Credit Suisse estimates



Figure 12: Himax—valuation vs peers

		Reporting	Price	Marketcap		Target		EPS		P/E (P/B (ROAE		Div yield	
Ticker	Company Name	Currency	11/12/2015	US\$ mn	Rating	price	2014	2015	2016	2015	2016	2015	2016	2015	2016	2014	2015
Taiwan Driv	<u>ver IC</u>																
3034.TW	Novatek	TWD	118.50	2,207	0	140.0	11.85	10.26	10.66	11.5	11.1	3.2	3.1	24.8	28.2	8.4	7.3
HIMX.OQ	Himax	USD	6.11	1,042	0	8.40	0.39	0.13	0.24	48.0	25.5	2.2	2.4	4.8	9.1	4.9	1.7
3598.TW	Ilitek*	TWD	49.20	108	NC	NA	6.50	4.42	4.30	11.1	11.4	1.1	1.0	9.5	9.2	NA	6.3
3545.TW	FocalTech	TWD	27.95	357	N	25.5	1.97	0.72	1.82	38.7	15.4	0.9	0.9	2.7	6.0	1.1	1.7
8016.TW	Sitronix*	TWD	93.10	339	NC	NA	5.93	6.90	8.14	13.5	11.4	2.5	2.3	20.1	23.1	4.8	5.2
3592.TWO	Raydium*	TWD	38.05	76	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Taiwan touc	ch IC and other disp	olay semis															
2458.TW	Elan	TWD	36.15	486	N	38.0	3.41	1.89	2.55	19.1	14.2	2.3	2.1	11.0	15.5	10.0	4.6
3598.TW	Ilitek*	TWD	49.20	108	NC	NA	6.50	4.42	4.30	11.1	11.4	1.1	1.0	9.5	9.2	NA	6.3
3556.TWO	EETI*	TWD	57.10	96	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4966.TWO	Parade	TWD	242.00	563	0	340.0	16.36	14.48	17.66	16.7	13.7	3.2	2.7	19.7	21.6	1.2	2.1
Global Drive	er IC																
108320.KQ	Siliconworks*	KRW	32,700	460	NC	NA	1,900	3,114	3,646	10.5	9.0	1.6	1.4	16.2	17.1	NA	2.2
2878.HK	Soloman Systech*	HKD	0.49	156	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Global touc	h IC																
SYNA	Synpatics*	USD	91.54	3,317	NC	NA	4.25	5.69	7.01	16.1	13.1	4.3	3.7	29.5	25.1	-	NA
CY	Cypress	USD	10.18	3,398	N	11.5	0.22	0.27	0.42	38.2	24.4	1.1	1.2	6.0	5.5	-	-
ATML	Atmel*	USD	7.85	3,299	NC	NA	0.39	0.34	0.39	23.2	20.1	3.8	3.5	18.1	17.7	-	2.0
096640.KQ	Melfas*	KRW	5,130	80	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: Company data, *IBES consensus, Credit Suisse estimates

Figure 13: Himax—one-year forward P/E



Source: Company data, Credit Suisse estimates

Figure 14: Himax—one-year forward P/B



Source: Company data, Credit Suisse estimates

Figure 15: Himax—quarterly P/L

Year-end 31 Dec (US\$ K)	1Q14	2Q14	3Q14	4Q14	1Q15	2Q15	3Q15	4Q15E	1Q16E	2Q16E	3Q16E	4Q16E	2013	2014	2015E	2016E
Sales	194,642	196,404	222,317	227,179	179,045	169,185	165,582	168,744	159,082	181,391	211,571	241,839	770,739	840,542	682,556	793,884
COGS	146,620	148,952	167,948	171,140	133,013	128,885	129,510	131,620	123,607	140,034	160,371	181,863	578,886	634,660	523,028	605,875
Depreciation	3,619	3,520	3,550	3,903	3,966	3,366	3,425	3,518	3,581	3,739	3,896	3,944	14,309	14,592	14,275	15,159
Gross Profits	48,022	47,452	54,369	56,039	46,032	40,300	36,072	37,124	35,475	41,357	51,200	59,976	191,853	205,882	159,528	188,009
Total Operating Exp.	28,919	29,022	41,813	33,403	30,384	31,426	38,533	33,243	32,930	32,650	37,660	34,825	117,510	133,157	133,586	138,065
Operating Exp. Promotion	4,195	4,296	6,921	5,714	4,591	4,511	5,468	4,717	4,673	4,633	5,344	4,942	18,995	21,126	19,287	19,592
Operating Exp. Administrative	4,270	4,506	6,515	4,901	4,493	4,275	5,158	4,057	4,395	4,436	5,234	4,490	18,147	20,192	17,983	18,556
Operating Expense R&D	20,454	20,220	28,377	22,788	21,300	22,640	27,907	24,468	23,862	23,581	27,081	25,393	80,368	91,839	96,315	99,917
EBIT	19,103	18,430	12,556	22,636	15,648	8,874	(2,461)	3,881	2,545	8,707	13,541	25,151	74,343	72,725	25,942	49,944
Non-Oper. Income (Loss)	(51)	10,913	158	1,749	(171)	1,321	682	506	318	363	423	484	1,057	12,769	2,338	1,588
Interest expenses	(113)	(117)	(139)	(149)	(114)	(107)	(152)	(152)	(177)	(177)	(177)	(177)	(401)	(518)	(525)	(706)
Interest income	123	213	167	225	202	204	116	119	119	153	149	132	527	728	641	552
Other Non-Op. Income/(Loss)	(61)	10,817	130	1,673	(259)	1,224	718	540	376	387	451	528	931	12,559	2,223	1,742
Pretax Income	19,052	29,343	12,714	24,385	15,477	10,195	(1,779)	4,387	2,863	9,070	13,964	25,635	75,400	85,494	28,280	51,532
Income Taxes Exp./(Gains)	3,620	6,156	2,568	9,247	3,916	2,579	1,151	2,413	702	2,222	3,421	6,281	19,476	21,591	10,059	12,625
Net Income before Extraord.	15,432	23,187	10,146	15,138	11,561	7,616	(2,930)	1,974	2,162	6,848	10,543	19,354	55,924	63,903	18,221	38,906
Net Income	15,714	24,112	11,147	15,625	12,565	8,832	(2,332)	2,852	3,021	7,573	10,961	19,611	61,476	66,598	21,917	41,166
EPS (US\$)	0.09	0.14	0.06	0.09	0.07	0.05	(0.01)	0.02	0.02	0.04	0.06	0.11	0.36	0.39	0.13	0.24
Aveage shares (K)	172,234	172,139	171,797	172,161	172,185	172,206	171,936	171,936	171,936	171,936	171,936	171,936	171,826	172,083	172,066	171,936
EBITDA	22,722	21,950	16,106	26,539	19,614	12,240	964	7,399	6,126	12,445	17,437	29,095	88,652	87,317	40,217	65,103
Manager (0/)																
Margins (%)	04.7	04.0	04.5	04.7	05.7	00.0	04.0	00.0	00.0	00.0	04.0	04.0	04.0	04.5	00.4	00.7
Gross Margin	24.7	24.2	24.5	24.7	25.7	23.8	21.8	22.0	22.3	22.8	24.2	24.8	24.9	24.5	23.4	23.7
Operating Margin	9.8	9.4	5.6	10.0	8.7	5.2 7.2	(1.5) 0.6	2.3 4.4	1.6	4.8	6.4 8.2	10.4	9.6	8.7	3.8	6.3
EBITDA Margin Tax Rate	11.7 19.0	11.2 21.0	7.2 20.2	11.7 37.9	11.0 25.3	7.2 25.3	(64.7)	4.4 55.0	3.9 24.5	6.9 24.5	8.2 24.5	12.0 24.5	11.5 25.8	10.4 25.3	5.9 35.6	8.2 24.5
	8.1	12.3	20.2 5.0	37.9 6.9	25.3 7.0	25.3 5.2	(04.7)	55.0 1.7	24.5 1.9	24.5 4.2	24.5 5.2	24.5 8.1	25.6 8.0	∠5.3 7.9	33.0	24.5 5.2
Net Margin	0.1	12.3	5.0	0.9	7.0	5.2	(1.4)	1.7	1.9	4.2	5.2	0.1	0.0	7.9	3.2	5.2
QoQ (%)																
Sales	(0)	1	13	2	(21)	(6)	(2)	2	(6)	14	17	14				
COGS)O	2	13	2	(22)	(3))O	2	(6)	13	15	13				
Gross Profit	(2)	(1)	15	3	(18)	(12)	(10)	3	(4)	17	24	17				
Operating Profit	(2)	(4)	(32)	80	(31)	(43)	(128)	NM	(34)	242	56	86				
Net Profit	(1)	53	(54)	40	(20)	(30)	(126)	NM	` 6 [′]	151	45	79				
YoY (%)																
Sales	11	(5)	15	16	(8)	(14)	(26)	(26)	(11)	7	28	43	5	9	(19)	16
				17	(9)	(13)	(23)	(23)	(7)	9	24	38	2	10	(18)	16
	11	(5)	17													
COGS	11 11	(5) (7)	17 12	14		, ,			٠,	3			12	7	. ,	18
		(5) (7) (22)	17 12 (13)		(4) (18)	(15) (52)	(34) (120)	(34) (83)	(23) (84)	3 (2)	42 NM	62 548	12 11		(23) (64)	18 93

Source: Company data, Credit Suisse estimates



Companies Mentioned (Price as of 12-Nov-2015)

AU Optronics (2409.TW, NT\$9.23) Atmel (ATML.OQ, \$7.85)

BOE (000725.SZ, Rmb3.12) Cypress Semiconductor Corp. (CY.OQ, \$10.18)

EETI (3556.TWO, NT\$57.1)

Elan Microelectronics Corp (2458.TW, NT\$36.15) FocalTech Corporation, Ltd. (3545.TW, NT\$27.95)

Himax Technologies, Inc. (HIMX.OQ, \$6.11, OUTPERFORM[V], TP \$8.4)

llitek (3598.TW, NT\$49.2)

Innolux Corporation (3481.TW, NT\$10.2)

Japan Display (6740.T, ¥429) LG Display Co Ltd. (034220.KS, W21,850)

Melfas (096640.KQ, W5,130)

Microsoft Corporation (MSFT.OQ, \$53.65)

Novatek Microelectronics Corp Ltd (3034.TW, NT\$118.5)

Parade Technologies (4966.TWO, NT\$242.0)

Raydium (3592.TWO, NT\$38.05)

Samsung Electronics (005930.KS, W1,317,000)

Silicon Works (108320.KQ, W32,700) Sitronix (8016.TW, NT\$93.1) Solomon Systech (2878.HK, HK\$0.49) Synaptics (SYNA.OQ, \$91.54) Tianma (000050.SZ, Rmb21.98) Truly International (0732.HK, HK\$1.84)

Disclosure Appendix

Important Global Disclosures

Jerry Su and Derrick Yang each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

3-Year Price and Rating History for Himax Technologies, Inc. (HIMX.OQ)

HIMX.OQ	Closing Price	Target Price	
Date	(US\$)	(US\$)	Rating
02-May-13	5.95		R
12-Mar-14	15.65	19.00	0 *
15-Apr-14	9.32	17.00	
09-May-14	6.68	13.00	
24-Jul-14	5.97	8.50	
08-Aug-14	7.40	9.00	
15-Sep-14	8.46	11.00	
27-Oct-14	7.71	12.00	
09-Feb-15	7.58	8.40	N
16-Apr-15	6.31	6.00	
27-Apr-15	6.16	5.90	
15-May-15	6.14	5.70	
29-Jun-15	7.90	8.40	
10-Aug-15	6.56	8.00	
28-Aug-15	6.88	8.80	0
30-Oct-15	5.92	8.20	



The analyst(s) responsible for preparing this research report received Compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities

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Outperform (O): The stock's total return is expected to outperform the relevant benchmark*over the next 12 months.

Neutral (N): The stock's total return is expected to be in line with the relevant benchmark* over the next 12 months.

Underperform (U): The stock's total return is expected to underperform the relevant benchmark* over the next 12 months.

*Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive. Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European ratings are based on a stock's total

Himax Technologies, Inc. (HIMX.OQ / HIMX US)

^{*} Asterisk signifies initiation or assumption of coverage.



return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin American and non-Japan Asia stocks, ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark; prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011.

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Overweight: The analyst's expectation for the sector's fundamentals and/or valuation is favorable over the next 12 months.

Market Weight: The analyst's expectation for the sector's fundamentals and/or valuation is neutral over the next 12 months.

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Underperform/Sell*	13%	(23% banking clients)
Restricted	1%	

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Price Target: (12 months) for Himax Technologies, Inc. (HIMX.OQ)

Method: Our target price of US\$8.4 for Himax Technologies is derived from our DCF (discounted cash flow) model, implying 21x 2017 P/E (price-to-earnings). We assume a neutral beta with a risk-free rate of 3.5%, equity risk premium of 8.0%, and terminal growth rate of 3.0%.

Risk: Risks that could impede achievement of our US\$8.4 target price for Himax Technologies include: (1) Better/weaker-than-expected demand for smartphone and tablet PCs. (2) Better/slower-than-expected 4K2K penetration. (3) Intensifying pricing competition and failure to lower its manufacturing costs for DDI products. (4) Faster/slower ramp up of non-driver business.

Please refer to the firm's disclosure website at https://rave.credit-suisse.com/disclosures for the definitions of abbreviations typically used in the target price method and risk sections.

See the Companies Mentioned section for full company names

The subject company (HIMX.OQ, 005930.KS, 3545.TW, CY.OQ, 3481.TW, 3034.TW, 034220.KS, MSFT.OQ) currently is, or was during the 12-month period preceding the date of distribution of this report, a client of Credit Suisse.

Credit Suisse provided investment banking services to the subject company (CY.OQ, 3034.TW, MSFT.OQ) within the past 12 months.

Credit Suisse has received investment banking related compensation from the subject company (CY.OQ, 3034.TW, MSFT.OQ) within the past 12 months



Credit Suisse expects to receive or intends to seek investment banking related compensation from the subject company (HIMX.OQ, 005930.KS, 3545.TW, CY.OQ, 6740.T, 3481.TW, 2458.TW, 3034.TW, 034220.KS, MSFT.OQ) within the next 3 months.

As of the date of this report, Credit Suisse makes a market in the following subject companies (CY.OQ, MSFT.OQ).

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Credit Suisse has a material conflict of interest with the subject company (005930.KS). Credit Suisse is acting as exclusive financial advisor to Samsung Electronics and Samsung Fine Chemicals in relation to the proposed sale of their ownership stakes in the semiconductor wafer joint ventures with SunEdison, SMP Ltd and MEMC Korea Company Ltd, to SunEdison.

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