

Trading update

# Supply chain issues intensify

IQE has cut its FY19 revenue and profit guidance in response to reduced demand from wireless customers and an internal issue affecting a major photonics (not VCSEL - vertical cavity surface emitting laser) customer. Following a 25% share price fall, the shares are trading within the range created by photonics peers on most metrics.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/17**	154.5	24.5	3.38	0.0	15.8	N/A
12/18	156.3	14.0	1.38	0.0	38.6	N/A
12/19e	147.2	5.4	0.52	0.0	101.8	N/A
12/20e	179.0	24.5	2.41	0.0	22.1	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. \*\*Restated

## **Customers cutting delivery forecasts**

IQE's customers manufacturing wireless semiconductor chips for the mobile phone industry are cutting back inventory levels in response to the uncertainty regarding future demand caused by lengthening mobile phone replacement cycles. This caution is exacerbated by the impact of Huawei's addition to the US Bureau of Industry and Security's Entity List. IQE's initial assessment of this was focused on customers directly involved in the Huawei supply chain, but the interconnected nature of the semiconductor supply chain means many more of IQE's customers have been affected indirectly. In addition, a major photonics customer purchasing indium phosphide (InP) epitaxy for laser chips has internal issues. Overall, the company guides FY19 revenue in the £140–160m range at an adjusted operating margin significantly below previously guided 10%.

## Long-term prospects sound

IQE's dominant position in the outsourced compound semiconductor epitaxy market means it has supply relationships with multiple non-US (and US) customers. It is therefore relatively agnostic to any mid- to long-term shifts in market share at either component or OEM level. For example, it is engaged in initial production activities with two Asian customers who stand to benefit from wireless supply chain shifts. On the photonics side, management expects to start mass production for two additional VCSEL customers in H219, with a further 13 customers at the sampling stage. In addition, IQE is engaging with multiple Asian chip companies on 10G and 25G lasers for data comms. These new business opportunities should mitigate the lack of business from the InP laser chip customer in the medium term.

## Valuation: Waiting for destocking to complete

If we restrict our peer-based comparison to the three listed companies offering epitaxy for VCSELs then IQE is trading within the valuation range for these stocks on most metrics. IQE has a much stronger market position than the other three, so trading towards the upper end of this smaller sample seems reasonable. Taking this approach, we see scope for share price recovery once semiconductor supply chains have stabilised and the current period of destocking is over.

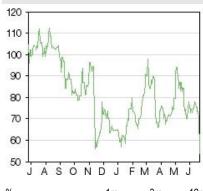
### Tech hardware & equipment

24 June 2019

Price	53.3p
Market cap	£422m

Net cash (£m) at end December 2018	20.8
Shares in issue	790.8m
Free float	86.3%
Code	IQE
Primary exchange	AIM
Secondary exchange	N/A

#### Share price performance



%	1m	3m	12m
Abs	(26.7)	(25.8)	(47.8)
Rel (local)	(27.3)	(26.3)	(46.3)
52-week high/low		112.5p	53.9p

### **Business description**

IQE is the leading supplier of epitaxial compound semiconductor wafers globally. The principal applications include radio frequency semiconductors, devices for optical networks, vertical cavity lasers, infrared semiconductors and power electronics.

power electronics.	
Next event	
Interims	September 2019
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## Changes to estimates

We revise our estimates to reflect:

- Change in FY19 wireless revenue guidance from a year-on-year decline of 15% to 20–25% (modelling 22.5%).
- Change in FY19 photonics guidance from over 50% growth year-on-year to less than 30% (modelling 25%).
- Change in FY19 adjusted operating margin guidance from over 10% to 'significantly below' that (currently modelling 5%).
- Comment by management on analyst call that it expects net debt at end FY19 to be c £15m at the middle of the revenue guidance range, while remaining within the limits of its revolving credit facility.
- Management has not updated its guidance for FY20 or mid-term growth, as this would be premature before the wireless market has stabilised and there is better visibility of the number and scale of new VCSEL ramp-ups. VCSEL-driven photonics growth should help offset the impact of reduced mobile phone shipments on wireless revenues, as will the transition to 5G, with greater wireless content per device. We model 10% year-on-year growth in FY20 wireless revenues, which assumes the period of destocking is over and the market has stabilised by the end of FY19. This gives FY20 segmental revenues of £83.4m, which is slightly higher than the FY15 level (£79.5m) when demand was also affected by de-stocking and substantially lower than FY16, FY17 or FY18, all of which recorded revenues above £90m. We continue to model 40% year-on-year growth in photonics, albeit from a lower level, partly because of the number of VCSEL projects sampling and partly because IQE is likely to win some new business with alternative suppliers of indium phosphide lasers because of its technical expertise.
- We have not changed our capitalised R&D or PP&E estimates as the bulk of this is associated with new VCSEL ramp-ups, which are not affected by the recent announcement.

Exhibit 1: Changes to estimates									
	FY18	FY19e			FY20e				
	Actual	Old	New	% change	Old	New	% change		
Revenue (£m)	156.3	169.9	147.2	-13.3%	204.3	179.0	-12.4%		
EBITDA (£m)	28.4	37.5	22.5	-40.0%	55.7	42.9	-23.1%		
Adjusted PBT (£m)	14.0	20.4	5.4	-73.4%	37.4	24.5	-34.5%		
Adjusted EPS (p)	1.38	2.04	0.52	-74.3%	3.74	2.41	-35.6%		
Capitalised R&D	12.0	13.0	13.0	0.0%	13.0	13.0	0.0%		
PPE	30.4	40.0	40.0	0.0%	15.0	15.0	0.0%		
Net cash/(debt)	20.8	0.1	(14.7)	N/A	13.9	(8.7)	N/A		
Source: Edison Investment Research									

### **Valuation**

We moved from a peer-based multiple approach to a DCF analysis in November 2018 because of the volatility of stocks in the sector. Although the DCF remains our preferred approach, this was based on the three- to five-year guidance management provided, which will not be updated until the current supply chain turmoil has abated, so we for now revert to using peer-based multiples.

The share price has declined by over 25% since the trading update and is now trading on 53.25p/share. Based on our revised estimates, the shares are trading on prospective EV/sales ratios that are at a discount to the mean for its epitaxy and opto-electronics peers, but on prospective EV/EBITDA and P/E ratios that are at a premium to the mean. If we restrict the

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comparison to the three listed companies offering epitaxy for VCSELs: IntelliEPI, LandMark Optoelectronics and Visual Photonics, then IQE is trading within the range for these three stocks on most valuation metrics. IQE has a much stronger market position than the other three, so trading towards the upper end of this smaller sample seems reasonable. Taking this approach, we see scope for share price recovery once semiconductor supply chains have stabilised and the current period of destocking is over.

Exhibit 2: Peer multiple ana	lysis						
Name	Market cap (\$m)	EV/Sales FY1 (x)	EV/Sales FY2 (x)	EV/EBITDA FY1 (x)	EV/EBITDA FY2 (x)	P/E FY1 (x)	P/E FY2 (x)
Epitaxy							
GCS Holdings Inc	157	1.7	-	-	-	19.4	-
IntelliEPI Inc (Cayman)	71	2.7	2.4	18.6	-	25.3	18.6
LandMark Optoelectronics Corp	707	7.8	6.1	14.6	11.2	29.6	20.5
Soitec	3,279	5.0	4.1	16.9	13.3	28.1	21.4
Visual Photonics Epitaxy Co	455	6.1	4.8	16.7	12.9	31.2	22.3
WIN Semiconductors Corp	2,709	4.7	4.0	12.3	9.7	29.8	21.0
Opto-electronics							
II-VI Inc	2,229	1.9	1.7	10.9	9.1	13.7	11.8
EMCORE Corp	94	0.5	0.4	-	10.2	-	-
Finisar Corp	2,700	1.7	1.6	8.9	8.0	18.4	15.8
Lumentum Holdings Inc	3,797	2.5	2.2	9.1	6.9	12.0	10.6
Mean Epitaxy and Opto-electronics		3.5	3.0	13.5	5.9	23.1	17.8
VCSEL mean*		5.5	4.4	16.7	12.1	28.7	20.5
IQE	\$535m	3.0	2.4	19.4	10.2	101.8	22.1

Source: Refinitiv, Edison Investment Research. Note: \*Mean is based on IntelliEPI, LandMark Optoelectronics and Visual Photonics. Prices at 21 June 2019.

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	£'000s	2017	2018	2019e	2020
Year End 31 December		IFRS	IFRS	IFRS	IFR
PROFIT & LOSS		restated	-	-	
Revenue		154,553	156,291	147,213	178,95
Cost of Sales (Inc D&A + SBP)		(115,857)	(111,748)	(103,785)	(126,16
Gross Profit		38,696	44,543	43,428	52,79
EBITDA		37,130	28,404	22,510	42,86
Depreciation and Amortisation		(10,596)	(12,364)	(15,081)	(18,38
Operating Profit (before amort. and except.)		26,534	16,040	7,429	24,48
Acquired Intangible Amortisation		(1,429)	(518)	(518)	(51
Exceptionals		(385)	(7,906)	0	(01
Share based payments		(7,526)	1,044	0	
Operating Profit		17,194	8,660	6,911	23.96
Underlying interest		(2,019)	(66)	0,511	20,30
Exceptionals and losses from JVs		80	(1,847)	(2,000)	
Profit Before Tax (norm)		24,515	13,974	5,429	24,48
Profit Before Tax (FRS 3)		15,095	6,747	4,911	23,96
, ,					
Reported tax Profit After Tax (norm)		(435) 24,998	(5,558) 11,229	(884) 4,545	(4,31 20,17
, ,					
Profit After Tax (FRS 3)		14,660	1,189	4,027	19,65
Average Number of Shares Outstanding (m)		689.5	761.8	788.5	790
EPS - normalised (p)		3.38	1.38	0.52	2.4
EPS - (IFRS) (p)		2.11	0.13	0.48	2.4
Dividend per share (p)		0.0	0.0	0.0	0
BALANCE SHEET					
Fixed Assets		224.836	267,476	304,877	313,97
Intangible Assets		108,513	121,775	127,467	131,86
Tangible Assets		90,875	124,520	156,228	160,93
Other		25,448	21,181	21,181	21,18
Current Assets		111,925	94,531	55,668	75,60
Stocks		33,044	35,709	34,000	40.69
Debtors		33,269	38,015	36,380	43,63
Cash		45,612	20,807	(14,711)	(8,73
Other		45,012	20,007	0	(0,73
Current Liabilities		(44,916)	(48,893)	(43,721)	(50,18
Creditors		(44,916)	(48,893)	(43,721)	(50,18
		(44,910)	(40,093)	(43,721)	(50,10
Short term borrowings Long Term Liabilities		(666)	(3,836)	(3,836)	/2 02
			(3,030)		(3,83
Long term borrowings		0		(2.036)	(2.02
Other long term liabilities		(666)	(3,836)	(3,836)	(3,83
Net Assets		291,179	309,278	312,989	335,5
CASH FLOW					
Operating Cash Flow		29,717	16,988	18,682	35,38
Net Interest		(2,125)	(66)	0	
Tax		(5,844)	(665)	(1,200)	(1,40
Capex		(28,190)	(42,362)	(53,000)	(28,00
Acquisitions/disposals		0	0	0	
inancing		94,912	813	0	
Dividends		0	0	0	
Net Cash Flow		88,470	(25,292)	(35,518)	5,9
Opening net debt/(cash)		39,549	(45,612)	(20,807)	14,7
HP finance leases initiated		00,040	0	0	1 1,1
Other		(3,309)	487	0	
Closing net debt/(cash)		(45,612)	(20,807)	14,711	8,7

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