

# IQE

## Assessment of short-term VCSEL slowdown

**IQE's post-close trading update shows that the short-term dip in production for one of its volume VCSEL programmes had a more severe impact on FY18 performance than management originally estimated. Although we are cutting our FY18 EPS estimate by 10.6%, we note the underperformance compared with management's guidance given in November appears confined to FY18. Importantly, it does not affect the prospects for photonics growth in the medium term, which are based on multiple VCSEL opportunities. Our revised estimates give an indicative value of 73p/share.**

| Year end | Revenue (£m) | PBT* (£m) | EPS* (p) | DPS (p) | P/E (x) | Yield (%) |
|----------|--------------|-----------|----------|---------|---------|-----------|
| 12/16    | 132.7        | 20.6      | 2.89     | 0.0     | 26.1    | N/A       |
| 12/17    | 154.5        | 24.3      | 3.36     | 0.0     | 22.4    | N/A       |
| 12/18e   | 157.0        | 13.2      | 1.62     | 0.0     | 46.5    | N/A       |
| 12/19e   | 194.8        | 34.1      | 3.48     | 0.0     | 21.7    | N/A       |

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

### Short-term impact on revenues and profitability

We had previously inferred that the end use for IQE's first volume VCSEL application was FaceID in new iPhones. Apple has publicly admitted that demand for iPhones has been lower than it expected, which has affected the supply chain. IQE had ramped up VCSEL production during H217, but pulled back output during the first three quarters of FY18 as the inventory overbuild was worked through. IQE began to build up VCSEL inventory again for the application during Q418, but shortly after it was obliged to cut back production. This surplus capacity was reallocated to accelerate VCSEL programme qualifications, which typically generate minimal margin.

### Other volume VCSEL programmes reduce risk

We believe that the short-term dip in VCSEL production relates to sales weakness for Apple iPhones and associated inventory destocking. Since management expects shipments to resume during Q119 it has reiterated FY19 and longer-term guidance. We note that IQE is involved in VCSEL ramp-ups for at least eight customers engaged in several market segments, providing alternative sources of photonics growth and reducing the exposure to weakness in product sales for any single OEM. The company is in the process of bringing additional photonics capacity into production at its new Newport foundry with 12 companies already actively qualifying this new volume production facility.

### Valuation: Upside from new VCSEL programmes

Using our revised estimates as the basis for a DCF analysis gives an indicative valuation of 73p/share (unchanged), which is close to current levels. Modelling segmental growth from FY20 onwards at the low and high ends of management guidance provided in September gives indicative valuations of 53p/share and 122p/share. We see potential for share price improvement should newsflow regarding new VCSEL programmes result in earnings upgrades.

Post-close trading update

Tech hardware & equipment

29 January 2019

**Price** **75.35p**

**Market cap** **£585m**

Net cash (£m) at end December 2018 20.8

Shares in issue 776.7m

Free float 83.8%

Code IQE

Primary exchange AIM

Secondary exchange N/A

#### Share price performance



% 1m 3m 12m

Abs 14.7 (11.9) (28.2)

Rel (local) 13.3 (10.0) (18.8)

52-week high/low 149.0p 56.2p

#### 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.

#### Next event

FY18 results 20 March 2019

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## Revisions to estimates

We revise our FY18 estimates to reflect:

- More precise guidance from management on the impact of the temporary dip in VCSEL production for what we believe to be for a Lumentum/Apple programme.
- £3.35m exceptional costs (£1.2m cash) relating to the closure of the New Jersey facility and redeployment of its reactors elsewhere within the group.
- £4.5m exceptional costs (all non-cash) relating to an onerous lease provision through to the end of the lease in 2022, for unused and unlet space in the Singapore facility.

Management has reiterated the guidance for FY19 that was originally given in November when the iPhone destocking was announced, so we leave our FY19 estimates unchanged and will revisit them when there is greater visibility of Q119 trading at the prelims in March.

### Exhibit 1: Changes to estimates

|                               | FY17   | FY18e |       |          | FY19e |       |          |
|-------------------------------|--------|-------|-------|----------|-------|-------|----------|
| (£m)                          | Actual | Old   | New   | % change | Old   | New   | % change |
| Revenue                       | 154.5  | 162.4 | 157.0 | -3.4%    | 194.8 | 194.8 | 0.0%     |
| EBITDA                        | 38.4   | 31.2  | 27.6  | -11.5%   | 50.0  | 50.0  | 0.0%     |
| Adjusted PBT                  | 24.3   | 16.8  | 13.2  | -21.4%   | 34.1  | 34.1  | 0.0%     |
| Adjusted EPS (p)              | 3.36   | 1.81  | 1.62  | -10.6%   | 3.48  | 3.48  | 0.0%     |
| Capitalised R&D               | 16.9   | 13.0  | 13.0  | 0.0%     | 13.0  | 13.0  | 0.0%     |
| Investment in tangible assets | 18.0*  | 33.0  | 33.0  | 0.0%     | 25.0  | 25.0  | 0.0%     |
| Net cash                      | 45.6   | 22.5  | 20.8  | -7.6%    | 23.0  | 18.2  | -20.8%   |

Source: Company data, Edison Investment Research. Note: \*Including £6.7m funded through finance leases.

## Valuation: Upside from new VCSEL programmes

### Exhibit 2: DCF analysis

|                                                                       | FY18e | FY19e | FY20e | FY21e | FY22e |
|-----------------------------------------------------------------------|-------|-------|-------|-------|-------|
| <b>Base case</b>                                                      |       |       |       |       |       |
| Wireless growth                                                       | 4.5%  | 5.0%  | 2.0%  | 2.0%  | 2.0%  |
| Photonics growth                                                      | -2.5% | 67.7% | 40.0% | 40.0% | 40.0% |
| IR growth                                                             | 12.0% | 12.0% | 7.0%  | 7.0%  | 7.0%  |
| Licence revenues (£m)                                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Group revenues (£m)                                                   | 157.0 | 194.8 | 229.0 | 275.8 | 340.2 |
| EBIT (£m)                                                             | 13.1  | 34.1  | 51.3  | 68.9  | 93.4  |
| <b>Indicative valuation (WACC 10%, terminal growth 2%): 73p/share</b> |       |       |       |       |       |
| <b>Low case</b>                                                       |       |       |       |       |       |
| Wireless growth                                                       | 4.5%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| Photonics growth                                                      | -2.5% | 40.0% | 40.0% | 40.0% | 40.0% |
| IR growth                                                             | 12.0% | 5.0%  | 5.0%  | 5.0%  | 5.0%  |
| Licence revenues (£m)                                                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Group revenues (£m)                                                   | 157.0 | 176.2 | 202.9 | 240.1 | 291.9 |
| EBIT (£m)                                                             | 13.1  | 28.7  | 42.7  | 57.0  | 77.0  |
| <b>Indicative valuation (WACC 10%, terminal growth 2%): 53p/share</b> |       |       |       |       |       |
| <b>High case</b>                                                      |       |       |       |       |       |
| Wireless growth                                                       | 4.5%  | 5.0%  | 10.0% | 10.0% | 10.0% |
| Photonics growth                                                      | -2.5% | 67.7% | 60.0% | 60.0% | 60.0% |
| IR growth                                                             | 12.0% | 15.0% | 15.0% | 15.0% | 15.0% |
| Licence revenues (£m)                                                 | 0.0   | 0.0   | 2.0   | 2.0   | 2.0   |
| Group revenues (£m)                                                   | 157.0 | 195.2 | 256.3 | 344.8 | 479.7 |
| EBIT (£m)                                                             | 13.1  | 34.2  | 59.2  | 91.0  | 141.0 |
| <b>Indicative valuation (WACC 10% Terminal growth 2%): 122p/share</b> |       |       |       |       |       |

Source: Edison Investment Research

As the share prices of stocks in this sector have been highly volatile in recent months, we have focused on a DCF analysis rather than a peer multiples approach. Moreover, for the reasons stated above, we believe that the reduction in VCSEL shipments is temporary and that photonics will continue to grow at 40–60% or more per annum from FY19 onwards as per management guidance and a DCF methodology captures the impact of this medium-term growth. We present three scenarios. The base case adopts the rate of growth used in our estimates, then segmental growth from FY20 onwards towards the lower end of management's guidance given at the capital markets day in September 2018. The low case adopts segmental growth from FY19 onwards at the lower end of management's guidance. The high case adopts the higher bound of the market growth for FY20–23 given in management's guidance. Our analysis gives an indicative valuation of 53–122p/share.

The share price has risen by over 30% since the sell-off in November following the first news of the dip in VCSEL production. It is now in line with our base case indicative valuation, suggesting that confidence in a recovery in volume VCSEL production has increased and also that investors have recognised that IQE's photonics activity involves more than a single, albeit very high profile VCSEL programme. Further newsflow on the VCSEL programmes that have recently started production has the potential to generate earnings upgrades and associated share price movement towards our high case indicative valuation of 122p/share.

**Exhibit 3: Financial summary**

|                                              | £'000s | 2016            | 2017      | 2018e     | 2019e     |
|----------------------------------------------|--------|-----------------|-----------|-----------|-----------|
| Year End 31 December                         |        | IFRS            | IFRS      | IFRS      | IFRS      |
| <b>PROFIT &amp; LOSS</b>                     |        | <b>restated</b> |           |           |           |
| Revenue                                      |        | 132,707         | 154,480   | 156,970   | 194,807   |
| Cost of Sales (Inc D&A + SBP)                |        | (98,538)        | (115,857) | (112,233) | (137,339) |
| Gross Profit                                 |        | 34,169          | 38,623    | 44,736    | 57,468    |
| EBITDA                                       |        | 33,057          | 38,384    | 27,642    | 50,008    |
| Depreciation and Amortisation                |        | (10,938)        | (12,025)  | (14,527)  | (15,932)  |
| Operating Profit (before amort. and except.) |        | 22,119          | 26,359    | 13,115    | 34,076    |
| Acquired Intangible Amortisation             |        | (1,374)         | (1,429)   | (1,429)   | (1,429)   |
| Exceptionals                                 |        | 1,962           | (385)     | (7,850)   | 0         |
| Share based payments                         |        | (2,881)         | (7,526)   | (3,000)   | (3,000)   |
| Operating Profit                             |        | 19,826          | 17,019    | 836       | 29,647    |
| Underlying interest                          |        | (1,463)         | (2,099)   | 100       | 0         |
| Exceptionals                                 |        | (26)            | 80        | 0         | 0         |
| Profit Before Tax (norm)                     |        | 20,630          | 24,340    | 13,215    | 34,076    |
| Profit Before Tax (FRS 3)                    |        | 18,363          | 14,920    | 936       | 29,647    |
| Tax                                          |        | (340)           | (435)     | (169)     | (5,336)   |
| Profit After Tax (norm)                      |        | 20,692          | 24,823    | 13,047    | 28,739    |
| Profit After Tax (FRS 3)                     |        | 18,023          | 14,485    | 768       | 24,310    |
| Average Number of Shares Outstanding (m)     |        | 671.5           | 689.5     | 751.7     | 776.0     |
| EPS - normalised (p)                         |        | 2.89            | 3.36      | 1.62      | 3.48      |
| EPS - (IFRS) (p)                             |        | 2.66            | 2.09      | 0.09      | 3.12      |
| Dividend per share (p)                       |        | 0.0             | 0.0       | 0.0       | 0.0       |
| <b>BALANCE SHEET</b>                         |        |                 |           |           |           |
| Fixed Assets                                 |        | 214,043         | 224,836   | 254,880   | 275,519   |
| Intangible Assets                            |        | 103,972         | 108,513   | 113,057   | 116,196   |
| Tangible Assets                              |        | 85,001          | 90,875    | 116,375   | 133,875   |
| Other                                        |        | 25,070          | 25,448    | 25,448    | 25,448    |
| Current Assets                               |        | 64,323          | 111,559   | 89,229    | 110,016   |
| Stocks                                       |        | 28,498          | 33,707    | 34,834    | 44,299    |
| Debtors                                      |        | 30,868          | 32,240    | 33,630    | 47,501    |
| Cash                                         |        | 4,957           | 45,612    | 20,764    | 18,217    |
| Other                                        |        | 0               | 0         | 0         | 0         |
| Current Liabilities                          |        | (51,522)        | (44,916)  | (43,144)  | (53,123)  |
| Creditors                                    |        | (43,870)        | (44,916)  | (43,144)  | (53,123)  |
| Short term borrowings                        |        | (7,652)         | 0         | 0         | 0         |
| Long Term Liabilities                        |        | (39,021)        | (666)     | (666)     | (666)     |
| Long term borrowings                         |        | (36,854)        | 0         | 0         | 0         |
| Other long term liabilities                  |        | (2,167)         | (666)     | (666)     | (666)     |
| Net Assets                                   |        | 187,823         | 290,813   | 300,299   | 331,746   |
| <b>CASH FLOW</b>                             |        |                 |           |           |           |
| Operating Cash Flow                          |        | 22,463          | 29,717    | 22,152    | 36,652    |
| Net Interest                                 |        | (1,489)         | (2,125)   | 100       | 0         |
| Tax                                          |        | (839)           | (5,844)   | (1,100)   | (1,200)   |
| Capex                                        |        | (19,060)        | (28,190)  | (46,000)  | (38,000)  |
| Acquisitions/disposals                       |        | (11,250)        | 0         | (3,846)   | 0         |
| Financing                                    |        | 578             | 94,912    | 3,846     | 0         |
| Dividends                                    |        | 0               | 0         | 0         | 0         |
| Net Cash Flow                                |        | (9,597)         | 88,470    | (24,848)  | (2,548)   |
| Opening net debt/(cash)                      |        | 23,223          | 39,549    | (45,612)  | (20,764)  |
| HP finance leases initiated                  |        | 0               | 0         | 0         | 0         |
| Other                                        |        | (6,729)         | (3,309)   | 0         | 0         |
| Closing net debt/(cash)                      |        | 39,549          | (45,612)  | (20,764)  | (18,217)  |

Source: Company data, Edison Investment Research

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