EDISON

IQE

Interim results

Photonics – light from a rising star

Tech hardware & equipment

IQE's diversification strategy has delivered a 71% jump in adjusted profit before tax during H116. Strong growth in photonics revenues was a key element of this improvement. This was boosted by a return to growth, albeit modest, in the wireless sector and contribution from licence income. We leave our estimates broadly unchanged, noting that this further confirmation of growth through diversification should support a continued upwards re-rating of the shares.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/14	112.0	16.2	2.42	0.0	11.7	N/A
12/15	114.0	17.6	2.60	0.0	10.9	N/A
12/16e	122.0	19.0	2.73	0.0	10.4	N/A
12/17e	127.8	21.9	3.12	0.0	9.1	N/A

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

Wireless back on growth track

Revenues increased by 18% year-on-year (£9.8m) during H116 to £63.0m. This resulted from modest growth in the wireless segment, strong growth in photonics and a contribution from licence income, which did not start generating revenues until H215. Adjusted gross margins rose by 4.2bp to 28.4%, offset by a 17% jump in adjusted SG&A expenses ahead of anticipated growth. Adjusted profit before tax rose by 71% (£4.2m) to £10.1m. Net debt increased by £10.4m to £33.6m (19.5% gearing), primarily because of the £10.7m final payment of the deferred consideration for Kopin and because of the adverse impact of the RFMD wafer discounts on cash conversion which end this month.

Photonics demand indicates future growth

The strong performance in H116 provides support for our estimates, which we leave broadly unchanged. Noting the level of photonics activity, a significant amount of which relates to new product development and qualifications, we expect continued growth and see potential for upgrades to our forecasts over the next 1-2 years. In the longer term, we note the potential for IQE to take share in the power switching market, which management estimates is four times larger than the wireless power amplifier market.

Valuation: Re-rating under way

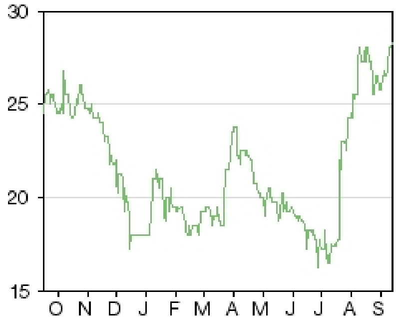
In our March note we identified the catalysts for an upwards re-rating of the shares as continued revenue diversification, improvement in cash conversion as the RFMD wafer discount tapers off (to be completed September 2016) and strengthening of the balance sheet as the final tranche of deferred consideration for Kopin is paid (completed H116). With a return to growth in wireless revenues and all of these three catalysts now present or very close, the deserved re-rating is under way. However, IQE's rating still remains undemanding on a fundamental basis and relative to its peers, giving scope for further share price appreciation.

13 September 2016

Price	**28.3p**
Market cap	**£190m**

Net debt (£m) at end June 2016	33.6
Shares in issue	672.3m
Free float	88%
Code	IQE
Primary exchange	AIM
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	3.7	50.7	10.8
Rel (local)	6.5	38.6	2.1
52-week high/low		28.2p	16.2p

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, power electronics and CPV solar cells.

Next events

Prelims	March 2017

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Edison profile page

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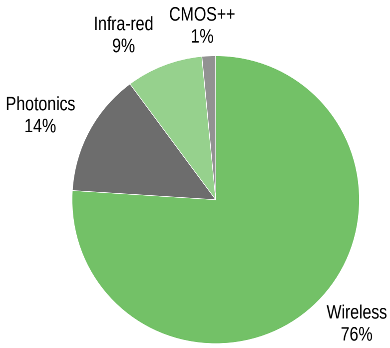
Segmental review

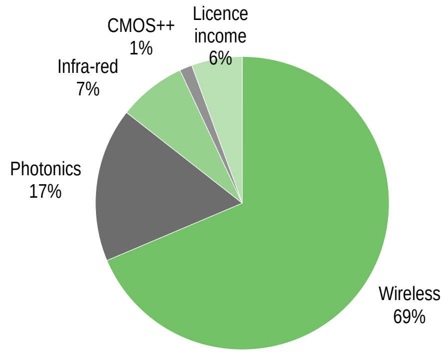
The H116 results show continued diversification of revenues, with a combination of strong growth in photonics revenues and contribution from licence revenues. Licence revenue is a relatively new income stream, which did not commence until H215.

Exhibit 1: H115 revenue split



Source: IQE

Exhibit 2: H116 revenue split



Source: IQE

Wireless

IQE's wireless revenues increased by 7% year-on-year during H116 to £43.2m, which is in line with management's estimates of mid-single-digit market growth. The destocking that characterised H215 has stopped. In addition, IQE is winning a higher proportion of clients' business and benefiting from some new projects with existing clients, which may become volume business in the medium term. Our estimates model H2 sectoral sales at similar levels to H116 (IQE no longer feels that the 45/55 H1/H2 split is valid), followed by a very modest (2%) revenue increase year-on-year during FY17.

Photonics

IQE's photonics revenues grew by 45% during H116 to £10.7m. Around half of the revenues were from VCSELs (vertical cavity surface emitting lasers), the other half InP (indium phosphide) epitaxy. Both technologies are currently showing strong growth. VCSELs are deployed in a wide range of high-speed communications and precision sensing applications including 3D scanning, gesture recognition and biometric sensing. InP lasers are an essential part of high-data rate FTTx (fibre-to-the-home/fibre-to-the-office) optical networks. IQE has developed a proprietary technology, which has enabled it to take on InP projects that previously customers had to manufacture themselves. Our estimates model H2 sectoral sales at similar levels to H116, followed by an 17% increase during FY17. This FY17 estimate could be revised upwards as development programmes convert to volume deliveries.

Infrared

IQE remains the dominant provider of materials used in high-resolution infrared systems. Sectoral revenues grew by 2% year-on-year to £4.7m. Our estimates model a modest 3% rise in sectoral sales during FY17.

Licence income

Licence income, which totalled £3.5m in H116 (nil H115), is a relatively new income stream for IQE. At present it is generated from two JVs. The one in Wales was formed in July 2015 with Cardiff University. The one in Singapore is with WIN Semiconductors and Nanyang Technological

University. Revenues are expected to be relatively lumpy. We expect FY16 licence revenues, which only include recurring elements, to be lower than FY15 revenues (£8.0m), which include upfront elements as well. We model FY17 licence income at FY16 levels. This revenue stream is likely to become more significant in the longer term if IQE's technology is deployed in volume applications such as general-purpose LED lighting and solar power.

Power

In September 2015, IQE accelerated its development activity in the power segment by acquiring exclusive rights to Translucent's patented cREO (crystalline rare earth oxide) technology. Importantly, Translucent has 74 granted patents and 13 pending patents, so the agreement also secures IP rights. This puts IQE in a strong position to benefit from the expected growth in the use of GaN (gallium nitride) compound semiconductor material for power electronics applications. This has significant potential if technology companies such as IQE can solve the problem of manufacturing GaN economically. IQE estimate that the market for power switching chips is c $12bn, which is four times the size of the wireless power amplifier chip market. Revenues from this sector were not material in H116. Until IQE begins to ship meaningful volumes of the material, we will treat revenues from this sector as upside to our estimates. A major milestone towards commercialising the material was reached in May 2016, when IQE announced that it had successfully transferred the cREO technology to its facility in North Carolina.

Advanced solar

IQE's focus in this sector has moved from terrestrial to space applications. For terrestrial applications, the substitution of silicon based photovoltaic (PV) cells by more efficient compound semiconductor based cells was predicated on the extra energy being generated offsetting the additional cost. This has not happened so far because the cost of silicon PV cells has slumped, while the price of electricity (which is linked to oil and gas prices) has fallen. This economic trade-off is less relevant for space applications, where the greater efficiency of compound semiconductor PV cells gives more power, and thus more capacity for data-transmission for the same weight payload. Revenues from this sector were not material in H116, though ongoing development activities encourage management to expect that it is likely that IQE will see good commercial progress in the next one to two years. Until IQE begins to ship meaningful volumes of the material, we will treat revenues from this sector as upside to our estimates.

Financials

H116 results

Revenues increased by 18% year-on-year (£9.8m) during H116 to £63.0m. This resulted from modest growth in the wireless segment, strong growth in photonics and a contribution from licence income, which did not start generating revenues until H215. Adjusted gross margins rose by 4.2bp to 28.4%, reflecting a higher proportion of photonics revenues and licence income. Adjusted sales, general and administrative expenses grew by 17.0%, as management strengthened the engineering resource to provide capacity to support the anticipated growth in photonics and allocated labour to repurpose existing equipment for anticipated photonics production. In addition, while work on early-stage projects for customers yields a relatively high gross margin, it results in low utilisation rates because the equipment is used for very low volume runs. Adjusted profit before tax rose by 71.4% (£4.2m) to £10.1m.

The improved profitability in H116, combined with a further reduction in the ongoing wafer discounts given to Qorvo (the merged RFMD/TriQuint entity), as deferred consideration for the RFMD epitaxy business, resulted in much stronger adjusted cash generation at the operating level (£13.0m vs

£5.3m in H115). However, IQE still consumed cash during H116. Net debt increased by £10.4m to £33.6m (19.5% gearing). The main causes of this were: £10.7m final tranche of deferred consideration for Kopin; £2.8m capitalised development expenditure (higher than £2.1m in H115 because of the levels of photonic and other development activity); and £4.3m capex (£1.3m H115) as IQE invested in equipment ahead of the anticipated ramp-up in photonics volumes.

Estimates

The H116 results show that IQE is in good shape to achieve the revenue and profit growth shown in our estimates. Indeed, given management's investment in equipment for an anticipated ramp-up in volumes for some photonics projects that are at the end of the development phase, it is likely, though by no means certain, that these estimates will be exceeded. We therefore leave our P&L estimates broadly unchanged. We make a small modification to EPS numbers to reflect a small increase in the number of shares in issue (FY16 EPS from 2.75p to 2.73p, FY17 EPS from 3.16p to 3.12p). We also increase gross margins slightly (from 27.0% to 27.4% in FY16) to reflect a slightly higher proportion of revenues attributable to photonics. This is offset by a small increase in operating costs to reflect increased engineering effort as noted earlier.

Noting the relatively high level of capital expenditure during H116, we raise our FY16 estimate of investment in tangible assets from £4.0m to £9.0m. This results in a corresponding increase in net debt to £30.5m (21% gearing) at end FY16 (previously £25.5m). We also raise our FY17 working capital estimate by £2.0m to reflect a more diversified revenue stream, resulting in £10.1m net debt (6% gearing) at end FY17 (previously £3.1m). We note that net debt increases during FY16, despite improved profitability, because of the cash outflow associated with paying the final tranche of deferred consideration for Kopin and the RFMD wafer discount (we estimate £5.5m) deducted from the operating cash flow. In FY17 there are no more wafer discounts or deferred consideration to be paid. The cash generated by operations therefore makes a significant dent in the net debt figure.

Valuation

Peer multiples

The share price has rallied from a low of 16.25p in June. However, IQE's rating remains undemanding on a fundamental basis and relative to its peers. We believe that a number of factors have contributed to this historically. These include uncertainty over both the prospects for the wireless business and the timing and rate at which revenues in new non-wireless fields will grow. The company's net debt and deferred consideration liability, and the suppressing effect on cash flows of the RFMD wafer discounts, have probably had an impact as well.

With regards to concerns about the wireless market, the interim results show that the destocking that bedevilled H215 is over and the market is growing again, albeit at a modest rate compared with five or six years ago. In addition, reliance on the wireless sector is reducing because of strong growth in photonics revenues and the creation of a new revenue stream from licence income. The announcement in the interims of another six months of strong growth in photonics gives reassurance that the contribution from this sector is here to stay. While there remains considerable uncertainty as to just how large revenues from this sector could become, our estimates treat the substantial growth that may result from existing photonics development programmes converting to volume deliveries as upside. As revenues from volume photonics projects, as well as material revenues from power electronics or advanced solar are excluded from our estimates, there is no reason, in our opinion, to apply a discounted multiple to reflect downside risk to earnings from these sectors.

Examining the potential cash flow and balance sheet concerns, both of these disappear during H216. The RFMD wafer discount finishes in H216, improving cash conversion. The deferred consideration balance, which was reduced from £17.9m at end December 2015 to £1.7m at end June 2016 following the final tranche of consideration for the Kopin acquisition, will be eliminated in full by the end of September 2016.

Since the reasons why investors have historically applied a discount are being removed, a further re-rating seems justified. Our analysis of peer multiples suggest that a low-to-mid-teens FY16e P/E multiple would be appropriate, suggesting a share price range of 33-41p in the medium term.

Exhibit 3: Multiples of listed peers

Company	Market cap	Current EV/S	Next EV/S	Current P/E	Next P/E
IQE PLC	£182m	1.8x	1.8x	10.4x	9.1x
Epitaxy					
Visual Photonics Epitaxy Co Ltd	£251m	3.5x	3.5x	16.7x	14.9x
IntelliEPI Inc	£84m	3.3x	2.8x	25.3x	18.2x
Land Mark Optoelectronics Corp	£727m	11.2x	8.7x	25.0x	19.8x
SOITEC	£416m	2.6x	2.3x	50.6x	26.1x
Wireless					
Broadcom Ltd	£50,303m	5.2x	4.2x	14.9x	12.5x
Qorvo Inc	£5,330m	2.4x	2.2x	10.8x	9.4x
Skyworks Solutions Inc	£10,070m	3.8x	3.5x	13.0x	11.6x
Opto-electronics					
II-VI Inc	£1,062m	1.6x	1.5x	20.5x	16.5x
EMCORE Corp	£100m	0.2x	0.2x	32.5x	15.6x

Source: Bloomberg, Edison Investment Research. Note: Prices at 9 September 2016.

Exit multiples

Another approach to valuation is provided by the price paid in calendar Q116 for IQE's small competitor EpiWorks by semiconductor laser specialist II-Vi. Including the deferred element, the transaction valued EpiWorks at 3.5x calendar 2015 revenues.

Exhibit 4: Financial summary

	£'000s	2014	2015	2016e	2017e
Year End 31 December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue		112,011	114,024	122,043	127,836
Cost of Sales (Inc D&A + SBP)		(80,459)	(81,585)	(88,643)	(92,044)
Gross Profit		31,552	32,439	33,400	35,792
EBITDA		27,009	29,001	31,169	34,469
Depreciation and Amortisation		(9,391)	(10,024)	(10,800)	(11,600)
Operating Profit (before amort. and except.)		17,618	18,977	20,369	22,869
Acquired Intangible Amortisation		(1,101)	(1,208)	(1,208)	(1,208)
Exceptionals		(7,892)	5,398	0	0
Share based payments		(1,458)	(2,001)	(2,001)	(2,001)
Operating Profit		7,167	21,166	17,160	19,660
Underlying interest		(1,429)	(1,403)	(1,343)	(1,007)
Exceptionals		(495)	(387)	0	0
Profit Before Tax (norm)		16,189	17,574	19,027	21,862
Profit Before Tax (FRS 3)		5,243	19,376	15,818	18,653
Tax		(3,247)	773	500	500
Profit After Tax (norm)		16,701	18,066	19,027	21,862
Profit After Tax (FRS 3)		1,996	20,149	16,318	19,153
Average Number of Shares Outstanding (m)		650.8	662.6	669.8	673.2
EPS - normalised fully diluted (p)		2.42	2.60	2.73	3.12
EPS - (IFRS) (p)		0.3	3.0	2.4	2.8
Dividend per share (p)		0.0	0.0	0.0	0.0
Gross Margin (%)		28.2	28.4	27.4	28.0
EBITDA Margin (%)		24.1	25.4	25.5	27.0
Operating Margin (before GW and except.) (%)		15.7	16.6	16.7	17.9
BALANCE SHEET					
Fixed Assets		160,999	174,207	176,699	173,391
Intangible Assets		82,079	86,843	87,135	87,027
Tangible Assets		66,588	65,154	67,354	64,154
Other		12,332	22,210	22,210	22,210
Current Assets		48,323	48,909	46,328	72,690
Stocks		18,276	21,215	22,000	25,900
Debtors		24,463	23,050	24,000	29,000
Cash		5,584	4,644	328	17,790
Other		0	0	0	0
Current Liabilities		(46,667)	(48,050)	(45,857)	(47,757)
Creditors		(31,947)	(44,809)	(39,616)	(44,516)
Short term borrowings		(14,720)	(3,241)	(6,241)	(3,241)
Long Term Liabilities		(41,480)	(28,032)	(28,032)	(28,032)
Long term borrowings		(22,115)	(24,626)	(24,626)	(24,626)
Other long term liabilities		(19,365)	(3,406)	(3,406)	(3,406)
Net Assets		121,175	147,034	149,138	170,292
CASH FLOW					
Operating Cash Flow		14,861	20,971	18,741	30,469
Net Interest		(1,428)	(1,403)	(1,343)	(1,007)
Tax		1,258	(459)	500	500
Capex		(9,426)	(10,002)	(14,500)	(9,500)
Acquisitions/disposals		0	0	(11,691)	0
Financing		278	544	977	0
Dividends		0	0	0	0
Net Cash Flow		5,543	9,651	(7,316)	20,462
Opening net debt/(cash)		34,351	31,251	23,223	30,539
HP finance leases initiated		0	0	0	0
Other		(2,443)	(1,623)	0	0
Closing net debt/(cash)		31,251	23,223	30,539	10,077

Source: IQE accounts, Edison Investment Research

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