

Vision. Right. Now.

# **EDISON** Scale research report - Initiation

# STEMMER IMAGING

## **Technology**

27 February 2018

**Price** Market cap

€34.0 €221m

demand for machine vision components. This is driven by a shift in the industrial landscape to a highly automated world where machines communicate with each other using imaging information as key decisionmaking data. This shift is not restricted to any one industry, but is being widely adopted as a way of achieving better quality control and higher efficiency rates.

STEMMER IMAGING (SI) presents an opportunity to benefit from rising

## Helping customers execute imaging projects

As one of Europe's largest independent providers of machine vision technology, SI has the scale to maintain relationships with more than 200 suppliers, as well as to develop its own software and hardware. The scale supports a highly technical offer: advising on component selection, providing feasibility studies for customers and tailoring machine vision systems to meet specific customer requirements. All of this drives margin and aids customer retention. SI's scale has also enabled it to act as a consolidator in the market, most recently purchasing its largest competitor in the Netherlands, in effect creating a virtuous circle. Since SI's mode of operation requires relatively low investment in assets, it can deliver high levels of return: 33.8% ROCE in FY17.

# IPO supports future expansion

Half of the €51m funds raised from the IPO will be used to continue SI's acquisition strategy. A push into other geographies in Europe where there is significant machine vision activity is likely, with expansion of the presence in Asia longer term. One-third of the funds will be used for software development, accelerating the shift to compact embedded machine vision systems suitable for deployment in robots. The remainder will be used to improve internal efficiencies through increased digitalisation of processes.

## Valuation: Premium for machine vision involvement

SI's FY17 EV/EBITDA multiple is close to the mean for our sample of companies producing machine vision components and systems (28.4 x vs 30.8x mean). Assuming that SI continues to grow at the same pace as other companies in this sector, a similar rating appears justified, even though this multiple is significantly higher than value-added distributors (28.4x vs 16.8x mean) as none of these is focused on the machine vision industry.

Financial summary							
Year end	Revenue (€m)	PBT (€m)	PAT (€m)	DPS (€)	P/E (x)	Yield (%)	
06/15	75.7	4.0	2.3	0.0	96.1	N/A	
06/16	83.6	4.0	2.5	0.0	88.4	N/A	
06/17	88.3	4.3	3.1	0.0	71.0	N/A	
Source: Co	mpany data						

Share details

Code S9I Deutsche Börse Scale Listing Shares in issue 6.5m

Last reported net cash\* as at end June 2017 €3.8m \*Excluding €1.8m securities

#### **Business description**

STEMMER IMAGING Group (SI) is Europe's leading independent provider of machine vision technology solutions to science and industry, selling both directly and indirectly, via system integrators or OEMs.

#### Bull

- Demand for machine vision solutions growing, driven by increased automation and IIoT.
- Broad supplier base combined with in-house development capability enables SI to offer precisely tailored solutions to customers.
- Not dependent on individual industry sectors.

#### Bear

- Business model difficult to implement in the US.
- Limited presence in Asia Pacific region at present.
- Meaningful proportion of market purchases directly from component suppliers.

#### **Analysts**

Anne Margaret Crow +44 (0) 203 077 5700 +44 (0) 203 077 5730 Katherine Thompson

tech@edisongroup.com Edison profile page

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# **Company description: Machine vision solutions**

STEMMER IMAGING Group (SI) is an independent provider of machine vision technology. (Machine vision is the technology required to extract actionable information from an image.) It sources system components such as industrial cameras, lenses, lighting, image capturing products, vision processing software, computers and specialist connectors from around 200 suppliers, as well as developing its own software, which enables rapid, reliable creation of machine vision solutions. Collectively, these cover the entire range of components required to produce a bespoke imaging solution. Around 70% of total revenues are generated from the creation of complex machine vision solutions in which SI combines and configures in-house and sourced components to create bespoke systems, adding value to the basic distribution proposition. Around 30% is generated from the resale of components, with SI typically advising customers on component selection as part of the process, again adding value to the basic distribution proposition. This value-add dimension is highly beneficial for both margins and customer retention. SI's independence with regard to component selection combined with extensive industry experience allows it to offer customers the ideal solution for the requested customer application. SI serves c 3,400 customers across a wide range of industries, making the group independent of the fortunes of an individual industry or customer.

#### **Exhibit 1: Market position** Machine Vision / Imaging Business model Component Manufacturers System Integrators & OEMs Suppliers Software Software Hardware Software Systems Applications Industrial Automation Other Applications End markets / Manufacturing sectors Non-manufacturing sectors industries Automotive Intelligent Traffic Systems Electrical, Electronics & Semiconductors Logistics & Postal Systems Food & Beverage Medical Equipment Rubber & Plastics Printing & Paper Security & Surveillance Pharmaceuticals, Cosmetics & Healthcare Sports, Entertainment & Broadcast Geographies Europe Rest of World SI Group positioning Source: Company data

SI AG was founded in 1987. In 2017 its majority owner and founder, Wilhelm Stemmer, retired and sold his 85% stake in SI AG to SI Holding, an investment vehicle owned by Primepulse, a family investment company. As part of this transaction, SI Holding/Primepulse acquired the remaining 15% stake in SI AG that had previously been held by other members of senior management and then allowed management to purchase shares in the newly formed SI Holding. SI AG listed on the Scale index of the Deutsche Börse on 27 February 2018. As part of the listing process SI AG raised €51m (gross) at €34.0/share from the issue of new shares and SI Holding/Primepulse reduced its stake, selling 1.5m existing shares (including overallotment option), while retaining a majority holding. The placing was significantly oversubscribed. The funds raised by the company will be used to finance future acquisitions and for product development, primarily of software (see IPO section).



The group employs over 260 people, around 70% of whom have a technical background. It is headquartered near to Munich, Germany. From there it has expanded in Europe through a sequence of acquisitions (Exhibit 2). It now has local sales offices in each of its core markets: Belgium, Denmark, Finland, France, Germany, Ireland, the Netherlands, Poland, Sweden, Switzerland and the UK. Collectively, these give access to most of the regions in Europe where there is demand for machine vision technology. The headquarters site also houses the customer training centre, laboratories for feasibility studies, international technical support, software development, cable manufacturing, procurement, warehousing and logistics.

Date	Event	
1973	STEMMER ELEKTRONIK founded	
1975	First machine vision system delivered	
1987	STEMMER IMAGING founded	
1997	Common Vision Blox (CVB) software launched	
2000	Customer training programme expanded	
2002	Cable production started	
2004	Firstsight Vision acquired in the UK	
	Sales operation in Switzerland launched	
	Imasys acquired in France	
	Logistics centre opened	
2010	SI training centre, European Imaging Academy, opened	
2012	Iris Vision acquired in the Netherlands	
2014	Parameter acquired, serving the Nordic region	
2015	Image House in Denmark acquired and integrated with Parameter	
2017	Founder Wilhelm Stemmer retires and sells 85% stake to SI Holding, part of Primepulse	
2018	Acquisition of Data Vision, Netherlands	
	Listing on Scale segment of Deutsche Börse	

## **Products and services**

#### Missing link between hardware and application

SI's core competence is the customisation, modification and adaptation of machine vision systems to customer specific needs. Around two-thirds of group sales are generated from customer-specific configurations of complex machine vision products compared with one-third from resale of components to OEMs. SI has developed its own interface for controlling cameras, imaging software and cabling to enable it to create complete systems. Around 10% of revenues are derived from the provision of software, services and other products developed in-house.

#### In-house software

SI recognised early on that software is a crucial component for machine vision and introduced its own library of imaging software, Common Vision Blox (CVB), in 1997. CVB helps customers create machine vision solutions tailored for specific production process requirements. It acts as an interface between cameras and the control elements of a machine vision system, interpreting the data from the camera, for example recognising bar codes and text. The software is suitable for many industries. Importantly, it is compatible with all major hardware components and all interfaces, encouraging adoption. The standard software licence is included in some cameras delivered by SI Group and provided to the customer free of charge. Charges are made for software licences, providing enhanced functionality such as X-ray applications. SI develops customer-specific software products for its clients for new or especially complex applications on request. Currently 60-70% of SI's customers use CVB. The software is active in over 75,000 applications.

#### In-house cabling

SI manufactures and tests cables that meet the specific requirements of machine vision systems. These have the appropriate connectors, can withstand repetitive movements when attached to robotic arms and are suitable for harsh industrial environments. This is too small an application



area to be of interest to manufactures of standard cables. Competitors in the machine vision market do not have the scale to be able to offer this. Over 2,000 different kinds of vision cables are produced and tested per year. Cables are sold as part of complete solutions or as standalone products.

#### **Services**

The customer offer includes services such as pre- and post-sales support, feasibility studies to validate products and systems before delivery, development services and customer training to support clients at every phase of a project. Management is keen to increase the proportion of revenues attributable to services, in part because this will have a beneficial impact on margins, in part because splitting out services as a separate revenue stream will encourage employees to charge for services where appropriate.

## **Example project**

Switzerland-based Leuthold Mechanik (HLM) builds machines that manufacture aluminium containers used, for example, in pet food packaging. Container walls must be as thin as possible to reduce material usage and thus cost, but if the walls get too thin there is greater risk of holes and leaks. The trays are pressed in batches of four at a rate of 480 trays per minute. The quality control module consists of four parallel lines with offset imaging stations. The LED lighting and cameras on each line are triggered by a light barrier as each tray approaches. Genie Nano cameras from Teledyne DALSA located underneath each conveyer belt inspect the containers from below using backlights. As no standard illumination was able to meet all the requirements, SI developed a dedicated LED illuminator for the project. The solution inspects 120 images per minute on each track, ie at the same rate as the trays are pressed out. The CVB software is used to analyse the image and communicate whether each tray is of acceptable quality or not. SI delivers all the components to HLM preconfigured and tested, considerably reducing the cost to HLM of building the quality control system. SI has delivered over 700 complete systems to HLM since 2008 and been engaged for follow-on projects.

# **Strategy**

## **Growth from existing customers**

Management has instigated a range of initiatives to generate revenue growth from existing relationships. This includes a shift to key account management for larger customers with the goal of deepening relationships and widening the services offered; a shift to self-service via the internet for smaller customers; and recognition of services as a separate revenue stream from FY16 onwards. For example, in order to strengthen customer relationships SI hosts the Machine Vision Technology Forum. This industry forum provides insights into the latest technologies and developments in imaging and is held in Germany, the UK, Sweden, France and the Netherlands. The last forum was attended by more than 1,000 people. To support the transition to self-service without sacrificing support, SI has developed the LensSensor app to assist customers in the design of optics for machine vision systems. It also publishes the Imaging & Vison Handbook, which is available in both print and online versions. This has more than 450 pages of insights into techniques, products and solutions for machine vision, and includes in-depth technology and selection guides to help customers choose the right products and technologies. This handbook is used as part of teaching material at several universities, helping to raise SI's profile.

## **Product expansion**

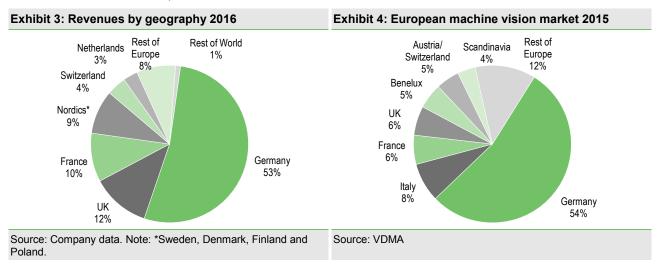
To maintain technology leadership, SI continues to invest in new customised products, solutions and services. A key focus is the development of CVB software for new applications as the Industrial



Internet of Things (IIoT) evolves. SI also continues to extend its supplier base so it can incorporate the latest developments in imaging technology such as hyperspectral imaging. In this technique cameras detect light at wavelengths outside the visual spectrum. This information is analysed to provide data, which previously could only be obtained by sending samples to a laboratory for analysis. For example biscuits can be inspected as they pass down a production line to check that they do not contain specific allergens, or bacon can be checked for fat content. Another important development area is embedded imaging processing systems, where a small circuit board containing a microprocessor with a Linux operating system is used instead of a complete laptop or PC running Windows, reducing the cost, size and energy consumption of the complete system, thus opening up new applications such as deployment on robots. SI is also working closely with the VDMA (German Machinery and Plant Manufacturing Association) to establish a standard industrial machine-to-machine communication protocol, OPC-UA (Open Platform Communication - Unified Architecture), to develop a methodology for transferring machine vision data through conventional networks. Alongside the opportunities in its core market, management is also considering potential developments for sectors that are using complementary technologies, such as augmented reality, advanced driver assistance systems and 3D printing.

## **Acquisitions**

SI has an exemplary track record of identifying and integrating acquisitions (see Exhibit 2). Management intends to continue this by consolidating its position in existing geographies, most recently with the acquisition of Data Vision in the Netherlands, expanding its footprint and adding complementary products, particularly software. We see Italy as a key target area, as this is a large potential market (see Exhibit 4) where SI is not currently generating meaningful revenues (see Exhibit 3).



## **Market overview**

## Machine vision key for automation and Industry 4.0

The machine vision market is driven by increasing use of automation in industry, accompanied by internet-enabled communication between machines to create intelligent systems. A report from MarketandMarkets predicted that the global industrial control and factory automation market would grow from US\$155.3bn in 2017 to US\$239.1bn by 2023, a CAGR of 7.4%.

Imaging technology is a key part of many automated manufacturing systems. Image processing machines check quality, guide cutting tools, identify components, read bar codes and provide key data for controlling processes, for example identifying when production equipment needs servicing. It is used for automated, optical test of products in industries as varied as food processing, printing,



medical device production and automotive component manufacture. Adoption of the technology significantly improves operation efficiency. Management estimates that the payback time for machine vision equipment may be as low as two months. Other applications include intelligent traffic control, security systems and medical diagnosis. A report published in May 2017 by Grand View Research predicted that the global machine vision technology market would grow from US\$9.1bn in 2016 to \$19.2bn by 2025, a CAGR of 8.5% from 2017 to 2025. The report expects the identification application segment to exhibit the fastest growth rate over the forecast period, followed by positioning and guidance applications. While the industry is expected to witness substantial growth in the Asia Pacific region over the next decade, the European machine vision market is estimated to reach US\$4.5bn by 2025. The German sector association, VDMA, reported growth of 10% for the European machine vision market in 2016 and predicted 8% growth in 2017.

The increasing adoption of machine vision technology across so many industries means that, with over 3,400 clients, SI is not dependent on any single sector. However, the top end-customer industries differ widely from country to country, depending on which industries are dominant there. For example in Germany metrology accounts for 21% of sales and the automotive industry 11%, while in the UK the broadcast/media/sports/entertainment sector accounts for 13% and in France the largest sector is traffic control, which accounts for 18% of sales.

A survey entitled Machine Vision in Europe by VDMA, the German industry association, noted that Germany was by far the largest European market for machine vision (see Exhibit 4), followed by Italy, France and the UK. SI already has a presence in most of these markets.

Over the last couple of decades end-customers have begun to build up in-house teams for integrating machine vision systems, rather than relying on external system integrators. SI has benefited from that, developing a comprehensive portfolio of value-add capability to help in-house teams, rather than simply reselling products to systems integrators.

## SI has largest share of European market

## Fragmented market offers ample M&A opportunities

SI operates in a highly fragmented market that is characterised by innovative companies with an average of only 41 employees. SI is one of the 10% of companies with over 100 employees. It is the only company with sufficient scale to play an active part in the consolidation of the European market. Based on VDMA data, management estimates that SI is the largest value-added distributor of machine vision technology in Europe with 16% market share. SI is also the largest distributor in Germany, Austria and Switzerland (16% share), France (27% share), the UK and Ireland (42% share) and the Nordic area (38% share). The recent acquisition of its largest competitor in the Benelux region, Data Vision, with c €4m annual sales, makes SI the largest value-added distributor in this region as well.

## Unparalleled diversity of machine vision components and systems

SI's scale means that it has attracted substantially more distribution franchises than any of its competitors, distributing over 20,000 individual machine vision products for c 200 suppliers including international leaders such as Intel, Mitsubishi and Teledyne DALSA. This gives its engineers much more choice when specifying components for a complete solution, resulting in superior system performance. It also provides more choice for those customers selecting individual components themselves. The scale brings purchasing power advantages and means that SI can afford to have around 500 products in stock at any one time, ensuring availability of commonly requested parts with long lead times. SI processes c 32,000 orders each year.



#### Profound technical knowledge

40 years of working in the industry brings deep understanding of the technology and there are a significant proportion of engineers engaged in sales and technical support, enabling SI to make customisation and support for customers a central part of its offer. Crucially, SI is able to include its own image analysis software and specialist video cabling in proposed solutions for customers. It is difficult for smaller competitors or new market entrants to be able to imitate these capabilities.

## **IPO**

SI AG listed on the Scale index of the Deutsche Börse on 27 February 2018. As part of the listing process it raised €51m (gross) through the issue of 1.5m new shares at €34.0/share, a 30% increase in capital. The funds raised by the company will be used to finance potential acquisitions (50% of funds) and to invest in product development, primarily of software (30% of funds), and to improve the group's structures and processes through digitalisation, for example increasing the number of low-value interactions with customers that can be managed automatically via the internet (20%). At the same time, as part of the placement, SI Holding, which had previously held a 100% stake in SI AG, sold 1.5m existing shares (including overallotment option), reducing its stake to 54%.

# Management, organisation and corporate governance

## Management board

Christof Zollitsch, Dipl.-Inform. (CEO): Christof has over 25 years of experience in the machine vision industry, having joined SI in 1991 as a field application engineer on graduation. He became head of sales in 1998 and MD in 2001. He has been instrumental to SI's success, including the integration of new subsidiaries and formation of the SI Group. Between 2009 and 2012 he was a member of the management board of the VDMA's machine vision department.

**Martin Kersting, Dipl. Phys. Ing. (CTO):** Martin also has over 25 years of experience in the machine vision industry and joined SI in 1991 as a field application engineer. Because of his programming skills, he has played in key role in the development of the CVB software, which was launched in 1997. He became head of technology in 1996 and technical director in 2001.

Lars Böhrnsen, Dipl.-Kfm. (CFO): Lars has over 13 years of experience in finance, having worked in management at Mazars Hemmelrath between 2004 and 2010 and Siemens between 2010 and 2012, where he was head of M&A accounting policies in the group accounting department in Munich. He joined SI in 2013 as head of finance and controlling, becoming CFO in 2017. Like Christof, he has been instrumental in the integration of new subsidiaries and formation of the SI Group.

#### Supervisory board

The three members of the supervisory board are involved with Primepulse. Primepulse also has holdings in Cancom (COKX:GER), AL-KO Group, and several other companies in the technology sector. Chairman Klaus Weinmann founded Cancom and is now CEO of Cancom, chairman of the supervisory board of AL-KO Kober and a member of the administrative council of Primepulse. Deputy chairman Stefan Kober, co-founder of Cancom, was a board member of Cancom with responsibility for sales and marketing until 2005, becoming a board member of AL-KO Kober in 2006, again with responsibility for sales and marketing. He has been chairman of AL-KO Kober since 2014. Markus Saller was involved with Cancom between 2012 and 2016, when he moved to Primepulse, where he is the director of corporate venture capital. He has been a member of the supervisory board of AL-KO Kober since 2017.



#### **Shareholders**

The shareholder list post-IPO continues to be dominated by SI Holding even though it sold 1.5m existing shares as part of the IPO process. The shares held by SI Holding are subject to a formal lock-up period extending to August 2018. For six months after that it must get agreement from the underwriter before it sells shares to maintain an orderly market. While management does not hold any shares directly in SI AG, collectively it holds a 25% stake in SI Holding, with CEO Christof Zollitsch and CTO Martin Kersting each having a 7.6% stake in SI Holding.

Exhibit 5: Shareholders				
Name	% holding*			
SI Holding	54%			
Free-float	46%			
Source: Company data. Note: *After placing.				

## **Financials**

#### Income statement

Sales grew by 10.4% year-on-year in FY16, benefiting from the acquisition of Parameter and Image House in Scandinavia. Sales growth was more modest in FY17, 5.6% year-on-year, but entirely organic. The increase was driven by demand in Germany, Benelux and Switzerland, moderated by adverse currency effects. Order intake during FY17 rose by  $\[ \in \]$ 2.3m to  $\[ \in \]$ 92.5m, giving a book-to-bill ratio of 1.05. Gross margin was stable throughout the period, 34% in FY15 and 35% in FY16 and FY17. Personnel expenses increased by  $\[ \in \]$ 3.0m (18.1%) in FY17 because of the distorting impact of a  $\[ \in \]$ 2.6m bonus collectively payable to all employees remaining with the company following the sale of a majority stake to Primepulse. Other operating expenses rose by 3.0%, slower than the rate of sales growth. Operating profit grew by 4.1% during FY17 as the loyalty bonus was partly offset by the release of a  $\[ \in \]$ 1.7m provision for retirement benefits that were no longer required following Primepulse's purchase of founder Wilhelm Stemmer's stake and his retirement from the management team.

#### Balance sheet and cash flow

During FY17 the inherent cash-generative nature of the business was obscured by several factors relating to the Primepulse transaction. Cash inflow from operating activity was 1.21x operating profit, as the increase in working capital was only €0.1m and goodwill on acquisitions is amortised over only five years to reflect the rapidly evolving technology landscape, resulting in a total depreciation and amortisation charge of €1.8m. Total investment in fixed assets was €1.5m. Around €0.2m of this was spent on software licences, the remainder on operating and office equipment, almost half of which was for new premises in Puchheim. In keeping with the asset-light business model, these are leased. Software and hardware development costs are expensed. In addition to these normal cash expenditures, €4.4m was spent acquiring the outstanding minority stakes in the subsidiaries in the UK, Switzerland and Netherlands, so the group now owns 100% of all its subsidiaries. €8.1m was allocated to a profit disbursement to the majority shareholder, Wilhelm Stemmer, prior to the Primepulse transaction. The profit disbursement and share purchases combined to give €9.5m cash outflow during the year.

This significant cash outflow resulted in a reduction in net cash to €3.8m at the end of FY17. This excludes €1.8m money-market fund/cash equivalent sold in July 2017 that were held to cover a provision for minor shareholders. As these liabilities were eliminated during the Primepulse transaction, these securities may now be invested in SI's future growth. There is no debt on the balance sheet. Management does not intend to take on any debt unless there is an intensive period of M&A activity. The increase in total liabilities at the end of FY17 is partly the result of the €2.6m retention bonus, partly an increase in trade payables linked to sales growth. The sharp fall in



shareholder equity at the end of FY17 is the result of the profit disbursement and the purchase of the outstanding shares in subsidiaries.

€000s	2015	2016	2017 HGB
	HGB	HGB	
Income Statement			
Revenue	75,728	83,602	88,304
Reported EBITDA	5,437	6,015	6,019
Normalised EBITDA*	6,117	7,106	7,584
Normalised EBITDA margin	8.1%	8.5%	8.6%
Operating profit	4,097	4,075	4,244
Operating margin	5.4%	4.9%	4.8%
Profit before tax	3,982	3,991	4,261
Reported profit after tax	2,312	2,468	3,112
Normalised profit after tax*	3,368	3,648	4,182
Consolidated net income	1,810	2,183	2,802
Balance Sheet			
Total non-current assets	5,267	4,676	4,328
Total current assets	26,848	29,346	23,929
Prepaid expenses and deferred tax assets	328	323	451
Total assets	32,443	34,345	28,708
Total liabilities	6,730	6,664	11,350
Provisions, deferred income and deferred tax liabilities	2,403	2,709	2,739
Shareholder equity	23,310	24,972	14,619
Total equity and liabilities	32,443	34,345	28,708
Cash flow			
Net cash from operating activities	1,618	5,035	5,151
Net cash from investing activities	(1,451)	(1,223)	(5,713)
Net Cash from financing activities	(2,078)	(481)	(8,945)
Net Cash Flow	(1,911)	3,331	(9,507)
Cash & cash equivalents end of year	10,338	13,351	3,756**

Source: Company prospectus. Note: \*Adjusted for currency effects, management incentives/bonuses and stock devaluation. \*\*Excluding €1,752k securities.

## **Valuation**

## Peer valuation

Exhibit 7: Multiples for listed peers						
Name	Market Cap (\$m)	Last reported EV/Sales (x)	Last reported EV/EBITDA (x)	Last reported P/E (x)	Last reported EBITDA margin (%)	Last reported Sales CAGR %*
Manufacturers						
Basler	877	7.2	37.3	80.3	19.2	10.9
Cognex	9,462	12.1	32.8	38.0	36.9	28.8
Isra Vision	1,016	5.8	22.4	40.2	25.9	12.9
Mean		8.4	30.8	52.8	27.4	17.6
Value-add distributors						
Addtech	1,454	1.8	17.4	26.6	10.5	2.9
APC Technology Group	15	0.9	23.4	20.0	3.8	(17.4)
Diploma	1,765	2.8	17.0	22.4	16.2	16.4
discoverIE Group	392	0.9	20.5	26.0	4.6	11.7
Electrocomponents	3,917	1.9	18.1	29.6	10.7	9.3
Nucletron Electronic	18	0.7	10.9	24.8	6.2	3.5
Solid State	49	0.9	10.1	13.8	8.9	4.6
Mean		1.4	16.8	23.3	8.7	4.4
STEMMER IMAGING	274	2.4	28.4**	52.8**	8.6	8.0

Source: Bloomberg, company data Note: \*Three-year period. \*\*Normalised for one-off effects including retention bonus. Prices at 23 February 2018.

SI's FY17 EV/EBITDA multiple is close to the mean for our sample of companies making machine vision components and systems (28.4x vs 30.8x mean), as is its FY17 P/E multiple (52.8x vs 52.8x mean). Assuming that SI is able to grow at the same pace as other companies in this sector, a similar rating appears justified. Although SI's sales CAGR was less than either Basler or ISRA



Vision during the three years ended FY17 (8.0% vs 11.9% mean), the sales CAGR was higher at 11.5% over the five years ending FY17. While SI is trading at a premium to the value-added distributors (28.4x vs 16.8x mean EV/EBITDA, 52.8x vs 23.3x mean P/E) none of these is focused on the machine vision industry. This methodology does not ascribe any value to future growth, but consensus estimates are not available yet on which Edison can base a comparison of prospective multiples. We note that the recent acquisition of Data Vision should contribute c €5m additional revenues, 6% of the FY17 total.

## **Sensitivities**

Change in market dynamics: we see a potential risk from the end-customers electing to trade directly with component suppliers, as happens in the US. Over the last couple of decades end-customers have begun to build up in-house teams for integrating machine vision systems, rather than relying on external system integrators or specialist machine vision distributors for support. In 2001, only 5% of sales in Germany were from direct contact between component manufacturers and end-users. The proportion is currently around 30%. In our view, a significant shift towards a higher proportion of direct sales would require either expansion of in-house teams so they can recreate SI's technical expertise themselves, or the emergence of machine vision components supplied with extensive suites of easy-to-use standardised applications, such that minimal expertise is required to create complete systems. In this eventuality, it is possible, in our opinion, that component manufacturers would license CVB functionality from SI rather than develop their own software.

**Change in interface standards:** SI is vulnerable to changes in interface standards which are not compatible with its CVB software. SI is a member of the panel determining industry standards, which limits the risk that there will be a problem with any proposed changes to the standards.

**Dependence on individual suppliers and customers:** SI's largest supplier accounted for 19% of FY16 revenues and the top 10 suppliers accounted for 67% of revenues. The largest client accounts for 6-9% of total revenue pa. 26% of FY16 revenue was derived from the top 20 customers. The composition of these changes from year to year depending on large infrastructure-related projects or events-related projects such as the Olympic Games.

**Risk of stock obsolescence:** SI regularly monitors and reviews its inventories. More than 95% of products are held for less than six months.

**Potential stock overhang:** SI Holding is required to hold its shares in SI until the end of August 2018 through a lock-in arrangement, and share disposals are subject to approval from the underwriter for a further six months to February 2019. We understand that SI Holding intends to hold a majority stake in SI AG for the long term.



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