Softing

(CDAX, Technology)

WARBURG RESEARCH

Buy	
EUR 14.00	
Price	EUR 10.38
Upside	34.9 %

Value Indicators:	EUR
DCF:	14.60
FCF-Value Potential 19e:	12.70

Share data:	
Bloomberg:	SYT GR
Reuters:	SYTG
ISIN:	DE0005178008

Description:
Soft- and hardware for data exchange in industrial plants and automotive electronics

Market Snapshot:	EUR m
Market cap:	72.2
No. of shares (m):	7.0
EV:	79.9
Freefloat MC:	53.4
Ø Trad. Vol. (30d):	120.18 th

Shareholders:	
Freefloat	74.0 %
Trier Asset Mgmt	26.0 %

Risk Profile (WRe):	2017e
Beta:	1.3
Price / Book:	1.4 x
Equity Ratio:	62 %
Net Fin. Debt / EBITDA:	0.5 x
Net Debt / EBITDA:	0.7 x

Future growth driven by IoT and the connected car

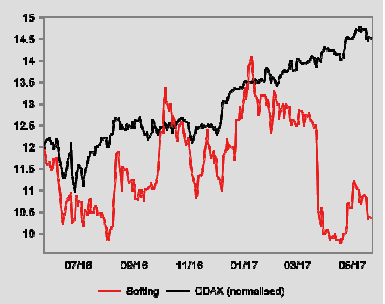
Softing's core competence is **data communication** in production plants, the process industry as well as automotive electronics. The company supplies these target markets with hardware and software, services as well as complete system solutions. This core competence is the connecting element in Softing's two segments.

- **Industrial Automation**: With a focus on **hardware components** and **software tools**, Softing addresses OEMs in mechanical and plant engineering, the process industry as well as end customers. Data exchange between sensors, control units and actuators but also ERP software in the customers' facilities is based on defined protocols. Softing enables this data exchange with the help of established industrial standards. Solutions of its subsidiary IT Networks are used to test complex IT networks in industry automation, office installations and data centres.
- **Automotive Electronics:** This segment addresses key technologies around the topics of **communication, diagnostics, measurement and testing** in automotive electronics and adjacent application areas such as the commercial vehicle and agricultural machinery industries. Softing's solutions cover a large part of a vehicle's lifecycle: from development and prototype testing to measurements, production processes and aftersales services. However, none of Softing's products are built into the cars thus avoiding the risk of product recalls. Customers include important OEMS such as VW, Daimler and Continental.

Market with niche character: The applications environment, which enables data exchange between electronical components (e.g. sensors and actors) both within networks and with the outside, is made up of numerous niches. In each of these niches Softing is competing with other companies which are often smaller. Softing has a competitive advantage over these companies because of its scale and solid financial situation. Major players in the automation industry are focused on the sale of their devices – the interconnectivity, which also has to be done with the competitors' components, is not their focus. On account of the high technological complexity the market is characterised by substantial barriers to market entry and strong customer loyalty.

Growth structurally driven by IoT and the connected and electrified car: In line with the increasing availability of fast data transfer, declining sensor prices and increasing computing capacity, data integration is becoming even more extensive. This allows, for instance, real-time collection of data for monitoring purposes or new forms of maintenance (predictive maintenance, remote access to data, etc.). As a technology enabler, Softing enables its customers to exchange data with large-scale industrial plants or within the car, and thus benefits from structural growth drivers. This trend is reflected by keywords such as **IoT**, **autonomous driving** and the **connected car (Car2X communication)**.

Softing has returned to double-digit growth with its Q1 figures. The Softing shares currently trade with a discount of 50-70% to the peer group and have an upside of some 30% to our DCF-based **PT of EUR 14**. The absence of development costs alone, which have been a burden in 2017 should serve as a catalyst. Buy.



Rel. Performance vs CDAX:	
1 month:	0.5 %
6 months:	-29.9 %
Year to date:	-27.8 %
Trailing 12 months:	-37.1 %

Company events:	
30.05.17	RS HEL
31.05.17	RS PAR
01.06.17	RS FFM
02.06.17	RS LON

FY End: 31.12. in EUR m	CAGR (16-19e)	2013	2014	2015	2016	2017e	2018e	2019e
Sales	5.7 %	52.6	74.5	82.3	80.4	84.0	89.0	95.0
Change Sales yoy		6.4 %	41.8 %	10.4 %	-2.3 %	4.4 %	6.0 %	6.7 %
Gross profit margin		*78.7 %*	*68.5 %*	*64.7 %*	*66.6 %*	*66.8 %*	*65.4 %*	*65.0 %*
EBITDA	3.8 %	9.4	10.1	10.8	12.3	11.2	12.7	13.7
Margin		*17.8 %*	*13.5 %*	*13.1 %*	*15.2 %*	*13.4 %*	*14.3 %*	*14.4 %*
EBIT	7.2 %	6.2	5.9	5.5	7.2	6.0	7.8	8.8
Margin		*11.8 %*	*7.9 %*	*6.6 %*	*8.9 %*	*7.2 %*	*8.8 %*	*9.3 %*
EBIT adj.	13.4 %	4.6	6.2	6.7	6.6	5.8	8.6	9.6
Net income	2.7 %	4.3	3.8	4.5	5.7	4.2	5.5	6.2
EPS	2.8 %	0.69	0.58	0.65	0.82	0.61	0.78	0.89
DPS	14.5 %	0.35	0.25	0.15	0.20	0.22	0.25	0.30
Dividend Yield		3.4 %	1.6 %	1.2 %	1.7 %	2.1 %	2.4 %	2.9 %
FCFPS		0.14	0.15	0.61	0.56	0.30	0.54	0.57
FCF / Market cap		1.4 %	1.0 %	4.8 %	4.8 %	2.9 %	5.2 %	5.5 %
EV / Sales		1.0 x	1.6 x	1.2 x	1.1 x	1.0 x	0.9 x	0.8 x
EV / EBITDA		5.7 x	11.8 x	9.4 x	7.3 x	7.1 x	6.1 x	5.5 x
EV / EBIT adj.		11.7 x	19.2 x	15.1 x	13.7 x	13.7 x	9.0 x	7.9 x
EV / EBIT		8.7 x	20.2 x	18.6 x	12.6 x	13.2 x	10.0 x	8.6 x
P / E		15.0 x	26.3 x	19.4 x	14.3 x	17.0 x	13.3 x	11.7 x
FCF Yield Potential		6.8 %	3.6 %	6.6 %	7.5 %	6.5 %	7.8 %	9.0 %
Net Debt		-11.2	18.3	13.9	8.3	7.6	5.6	3.4
ROCE (NOPAT)		32.4 %	11.4 %	8.4 %	10.5 %	7.4 %	9.3 %	10.2 %
Guidance:		2017: revenues ca. EUR 85m; EBIT ca. EUR 6m						

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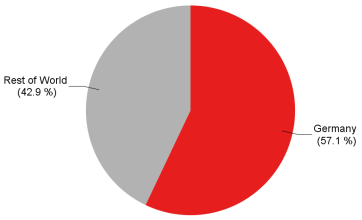
Sales development
in EUR m

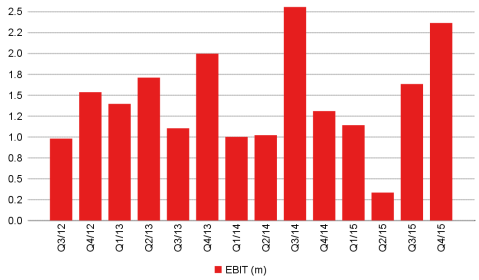
Source: Company

Sales by regions
2016; in %



Source: Company

EBIT development
in EUR m



Source: Company

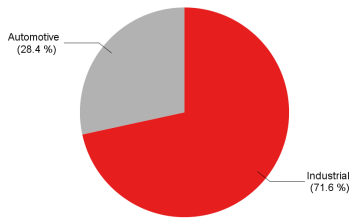
Company Background

- Softing has the necessary expertise on information exchange between various devices, sensors, plant and software solutions in automated processes. The business activity comprises two segments.
- Industrial Automation: hardware and software solutions for the exchange of information in all kinds of production including montage lines, chemical plants, oil and gas extraction or refineries.
- The subsidiary IT Networks is part of the Industrial Automation segment. Its solutions are used to test complex IT networks in industrial automation, office installations and data centers.
- Automotive Electronics: The solutions allow engineers and workshop mechanics to test automotive electronics in the development phase, production or repair and to recognise errors through data evaluation.
- The solutions in the automotive segment are not for application within the vehicles and therefore do not pose a product re-call risk for the company.

Competitive Quality

- World market leader in tools to recognise errors in production plant (so called field bus diagnostics)
- European market leader in the networking of various production plant elements as well as in business-related software (so-called OPC products).
- World market leader in components for the exchange of information in gas and oil plants. Some >50% of all devices registered worldwide that are used in these plants include components from Softing.
- Through participation in international committees that set standards for the exchange of information, a short time-to-market is achieved.
- The high complexity of Softing's business activity is the single most important barrier to market entry for potential competitors.

Sales by segments
2016; in %



Source: Company

Summary of Investment Case

Investment triggers

- Softing is an enabler of data exchange in industrial networks and automotive electronics and thus **is paving the way for trends such as IoT and Industry 4.0 and the connected car.**
- **Guidance increase:** Softing has returned to growth with its Q1 figures: Revenues in the Industrial Automation segment were up 27% driven by discrete manufacturing. The order backlog grew by more than 50% yoy to EUR 15m. The revenue guidance was raised from >EUR 80m to ca. EUR 85m.
- **Growth acceleration possible:** Towards the end of the current fiscal year, process automation is expected to gain momentum and thus consolidate growth. The completion of comprehensive development projects should mark the return to growth in the **Automotive Electronics** segment from Q3.
- **Diagnostics app:** The successful launch of a diagnostics app for vehicles alone has the potential to grow operating earnings by more than 50% and generate recurring revenues of ca. EUR 10m.
- **Completion of developments in the Automotive segment:** The development of new solutions in the area of the connected car will affect the 2017e operating results by up to EUR 3m (partly capitalised). Their discontinuation should contribute to earnings momentum in 2018e, and support the share price development.

Structurally growing markets

- The number of connected devices is constantly growing at rates in the **medium to high single-digit percentage range**. This development is reflected by terms such as IoT and Industry 4.0.
- Automobiles are becoming increasingly connected as well: within a car through electronics (entertainment, climate and safety networks) which increases the number of interconnected components. Additionally, the car is interconnected with the environment, enabling remote access to vehicle data (fuel level, speed, maintenance, etc.) e.g. as part of the fleet management.
- We expect the Softing group to grow revenues in the medium to high single-digit percentage range. Operating earnings should be driven by the gradual expansion of margins.
- In the IT Networks (cable testers) business unit alone, Softing is expected to boost revenues by some EUR 5m (+50% yoy) over the next three years based on its technological edge, which contributes to visibility on growth.

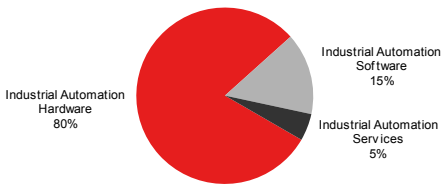
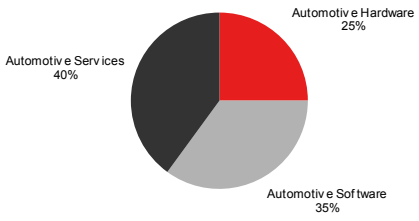
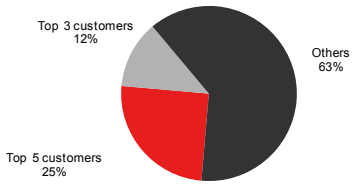
Competitive quality

- The markets addressed by Softing are **niche-like**. Softing has a globally leading position in some of these niches.
- **High complexity** of the business activity and reputation serve as a barrier to market entry for the mostly smaller suppliers, who often are engineering offices etc.
- **Appreciation as technology enabler:** Softing enables its customers to interconnect different parts of industrial plants; the company enables equipment manufacturers to tap (new) markets; garages and other providers gain access to vehicle data thanks to Softing.

Valuation

- The price target of EUR 14 is based on a DCF model.
- The **FCF Value Potential** indicates a value of EUR 12, but does not sufficiently recognise future growth.
- **The peer group comparison on the basis of EV/EBIT multiples points to an upside of 50-70%. Softing's return to dynamic growth should help close the valuation gap.**

Company Overview

Segments	Industrial Automation	Automotive Electronics
Core topics	Networking of automation components to provide data from the production level both locally and in the Cloud for controlling purposes and further analyses. The products enable the controlling and diagnostics of technical communication networks, thus guaranteeing a reliable data flow.	Diagnostics, measurement and testing in automotive electronics and closely related electronic areas such as the commercial vehicle and agricultural machinery industries
Range of offers	Hardware components (e.g. interface cards, gateways), chip solutions and communication software (stacks), software tools (e.g. OPC server development tool kit) and diagnostics devices	Hardware products (e.g. VCIs) and software products (e.g. ODX software), programming interfaces, diagnostics apps as well as on-site consulting and engineering
Revenue 2017e	EUR 67m	EUR 17m
Growth 2017e	16%	-26%
Costomers/References:	DS Smith, Wacker Chemie, Kongsberg, Siemens, Rockwell Automation etc.	e.g. Volkswagen, Audi, Daimler, Heavy Duty Diesel, Continental
Market and market environment	The market is made up of numerous niches, in which Softing meets different customer groups and competitors. The communcation solutions market for data exchange in industrial applications and vehicles is strongly fragmented. No competitor is identical with Softing.	
Competitors	**Factory automation:** Customers are usually large players of the automation industry. They can also be competitors in individual sectors; HMS Networks, small local players such as Hilscher, Comsoft, and other. **Process automation:** SMAR, Emerson. OPC Server: Matricon (Honeywell), Prosys. IT Networks diagnostics: Fluke (part of Danaher).	e.g. ESI Groupe, Actia (in the area of VCIs), ESG, Vector Informatik, Hella and in part also other automotive suppliers
Growth drivers	**IoT/Industry 4.0:** Growing number of networked devices in industrial production and process automation, remote access to devices (control, diagnostics, etc.)	Electrification of vehicles, networking (e.g. remote diagnostics and remote access), model diversity continues to grow, increasing complexity of vehicle electronics, standardisation of data transmission in areas that do not offer any differentiation for vehicle manufacturers.
Revenues splits		
		

Source: Warburg Research

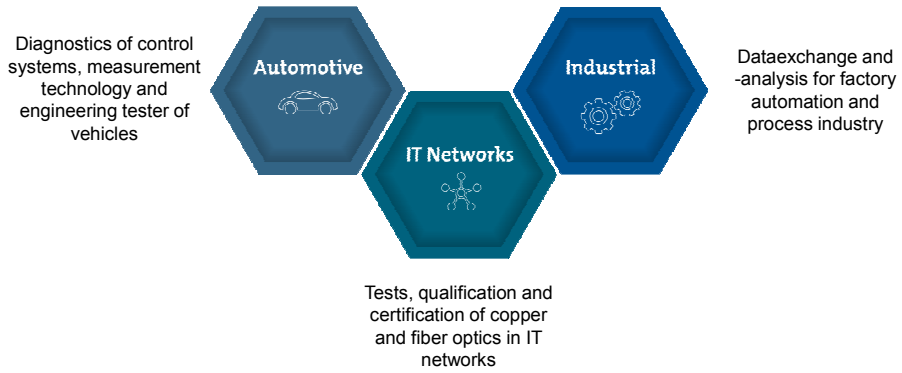
Networks for data exchange, for instance in offices, are generally known and regulate the communication between PC, printers, copiers, and other network devices on the basis of communication standards.

These networks also exist in industrial production and in the process and automotive industries. However, the networks used in this context have to meet other requirements. This includes, for instance, real-time capability, i.e. the capability to transmit data within clearly defined time intervals and at a specified speed, while following a fixed sequence. Unlike in the office, where the chronological order of, for instance, print jobs does not make any difference, this capability is decisive in industrial production.

Knowledge of data exchange as a core competence

Softing's core competence is the knowledge of how this data exchange works. At the same time, it combines the company's two segments, **Industrial Automation** and **Automotive Electronics**.

Communication technology as connecting core competence



Source: Softing

The **Automotive Electronics segment** offers hardware and software around the key topics of **diagnostics, measurement and testing**. These products are used in automobiles along the entire value chain, from development and production to customer services in a garage. However, Softing does not offer any products that are part of the vehicle to avoid liability and recall risks.

Softing's core competence in the Industrial Automation segment is its focus on data transmission between the incorporated individual components in the facilities of the process and production industries. To this end, the company offers solutions based on the Foundation Fieldbus and PROFIBUS standards, Industrial Ethernet solutions as well as solutions for network diagnostics. Furthermore, the company's gateways allow for communication between devices operating with different transmission standards.

Investment Case

In addition to the upside to our price target, an investment in the Softing shares is supported by the following reasons in particular:

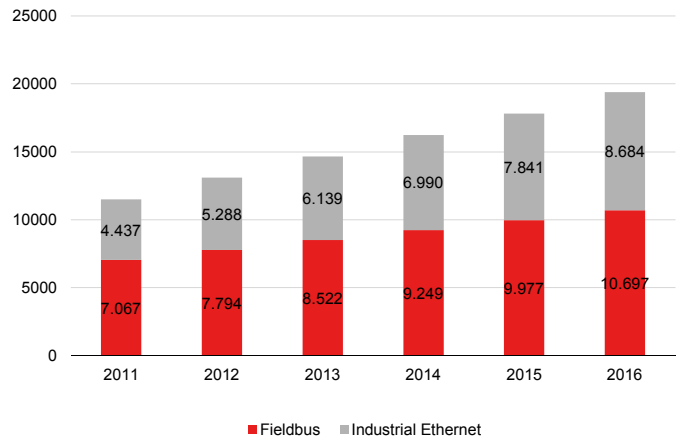
1. **Softing is one of the few "pure plays" for trends such as**
   - **"Internet of Things" or "Industry 4.0":** Softing's solutions enable the interconnection of systems that are based on different communication standards.
   - **Connected car:** Remote access to vehicles is increasingly gaining importance. Thanks to its expertise, Softing is taking on a key role.

2. **Good competitive position in market niches:** While the automation technology is a multi-billion market, markets providing solutions for the exchange of data in industrial networks or with the car have **niche characteristics**. To some extent Softing is an international leader in these market niches and is appreciated by its customers as a technology enabler.

3. **High barriers to market entry:** Amongst others, these barriers result from technological complexity and the fact that customers prefer partners, who can exist in the market in the long term thanks to their position and financial stability. Additionally, components and solutions only make up a small fraction of the costs in production plants. This reduces competition.

4. **Structural trends lay the foundation for future growth:** The number of connected devices in the networks of industrial production and process automation is steadily rising. The solutions for fieldbus systems, which Softing addresses in particular, are growing at rates of between ca. 5% and 7%. At the same time, there is a growing need to control, re-calibrate and read devices remotely. This lays the foundation for the demand of Softing's solutions.

Number of newly connected nodes is growing

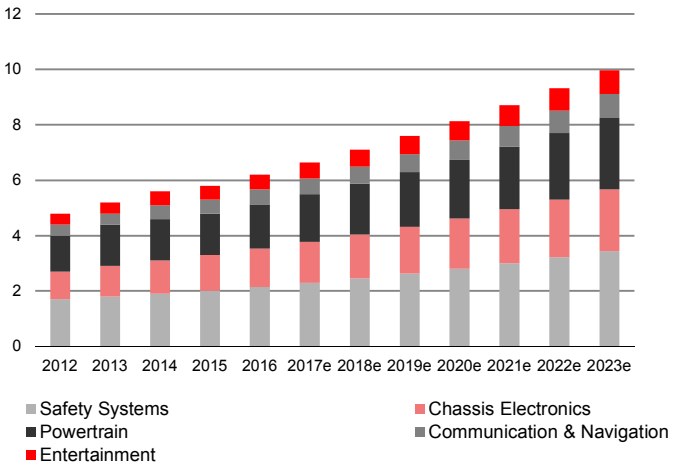


Source: IMS Research

5. **Growing complexity in automobiles:** Modern vehicles have five networks. As the number of control units is growing as well, the complexity in cars is extremely high. As a result of an increasingly **connected car** (both internally and to the outside world) it is more important than ever to test the functions of the control units, and to collect and exchange diagnostic data. This is the breeding ground for Softing's revenues in this segment.

Number of control units in a car increase its complexity

Market size of control units in USD billion



Source: Global Market Insights

6. **Double-digit organic growth in Q1 marks the turning point:** Following two years with mixed results driven by both the target markets (e.g. weak demand in the oil and gas industry, mixed business at Rockwell) and the lifecycle of individual products, Softing returned to growth in Q1 with an increase in revenue of 11% driven by factory automation and IT networks.

7. **Automotive segment about to return to growth:** To seize the growth opportunities offered, for instance those arising from the connected car, Softing has deliberately foregone revenue-generating customer projects in 2016 and H1 2017 and has used personal resources for the development of its own projects. The first products from this development will presumably be finished after Q2 and are expected to drive future growth in this segment.

8. **Vehicle diagnostics should stimulate growth:** The newly developed products are expected to help Softing benefit from the megatrends in the automotive industry such as remote diagnostics and security. In his context, Softing will play a key role regarding topics such as autonomous driving or the management of vehicle fleets. The first pilot projects are already up and running.

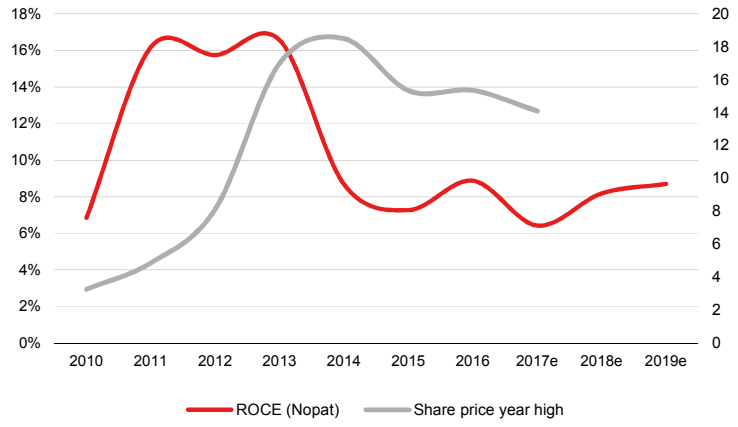
9. **Diagnostics app with significant sales and earnings potential:** Softing has launched an automotive diagnostics app for aftersales services. The app is offered at a substantially lower price than the available solutions (ca. EUR 120-300 for the software product and ca. EUR 80 for the necessary hardware component). The company aims to sell 1,000 licences in the current year. Some 50k service partners make up the worldwide addressable market. The successful market launch of this product would thus hold the potential to **grow EBITDA by more than 50%**.

10. **Dynamic growth at IT Networks:** Softing is one of two providers able to measure cables with a specification of up to CAT 8. This and the launch of the world's first WLAN testers able to measure the entire spectrum of the 802.11ac standards are reasons for Softing's clear growth strategy in this business unit. In Q1 2017, revenues in this segment grew by 20%. Softing aims to increase revenue from ca. EUR 10m (2016) to over EUR 15m over the next three years. As a result, this business unit, which has the potential to become a separate segment, should be a major source of growth.

11. **Absence of development expenses that burdened earnings**: The absence of development expenses in 2017, which were a burden to the Automotive segment (EUR 3m, partly capitalised), should deliver positive momentum to earnings and contribute to a positive development of earnings and share price.

12. As the sales volume grows, profitability and thus ROCE should increase again. Amortisations from purchase price allocations are currently having a negative impact of ca. 1.5 percentage points. The company will earn the cost of capital (WACC of 7.4%) with it from the next years already.

ROCE has passed the trough



Source: Warburg Research

Conclusion: The Softing shares are currently trading at a discount of ca. 50-70% compared to peers. This valuation gap is expected to be closed by continuing along the path of organic growth the company has returned to and by enhancing its IR activities. The DCF-based PT offers an upside of ca. 30% leading to a Buy rating.

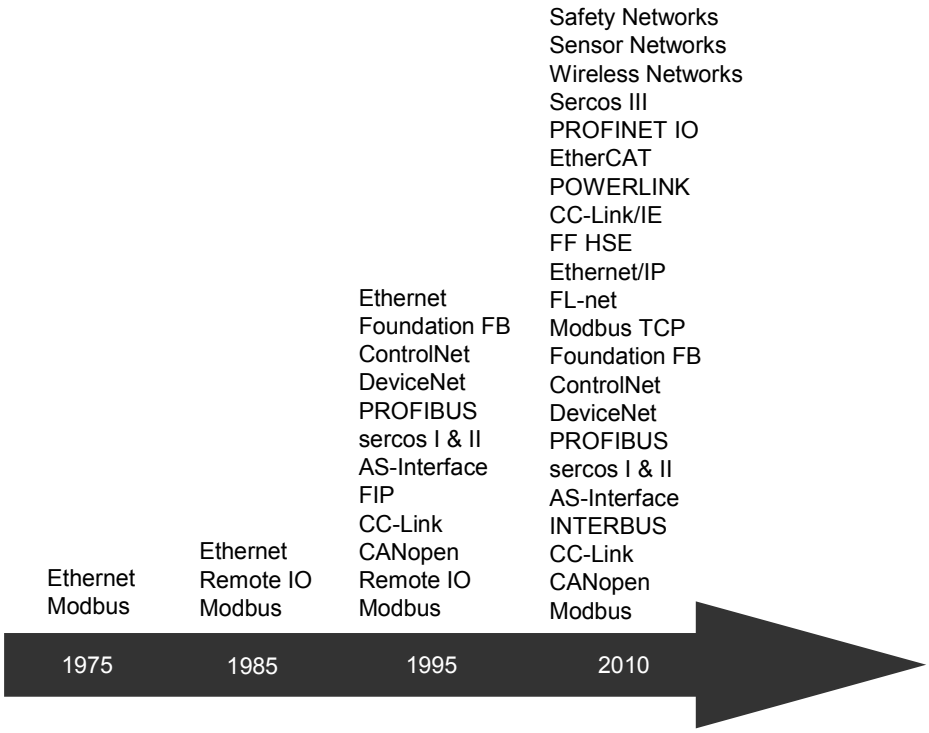
Competitive Quality

- **The company enjoys appreciation as a technology enabler, as the high technological complexity and growing diversity lead to higher outsourcing to specialised suppliers like Softing.**
- **Major players in automation technology do not differ in terms of communication solutions and thus are not direct competitors**
- **Softing often competes with smaller market participants.**
- **Technological complexity and reputation act as barriers to market entry for smaller suppliers.**

Appreciation as a technology enabler

- **Technology enabler: Notebook suppliers do not differ because their products have an Ethernet port**. This also holds true for suppliers of devices for industrial automation. To be able to connect their devices to certain protocols and communication standards and to exploit the potential of connected systems, these suppliers and end customers rely on providers such as Softing. Consequently, the customers' access to certain markets is only made possible through Softing, which in turn receives appreciation.

Diversity of communication systems leads to complexity



Source: Warburg Research

- **Investment protection:** It is quite often the fact that devices and communication systems of different automation suppliers have to be interconnected, which is not necessarily in the interest of the major players in the automation industry. Softing enables these kinds of interconnections so that end customers can pursue a best-of-breed strategy for automation devices while protecting investments made in e.g. fieldbus systems that can be connected to an industrial Ethernet system.
- **Key role in vehicle diagnostics:** Automotive electronics are always accessed via the same diagnostics interface. Softing's expertise in diagnostic mechanisms is essential for topics such as remote access to a vehicle. Vehicle diagnostics is much more than just the detection of faults. It mainly includes the monitoring of sensors and actors in the vehicle, which are connected to the control unit. It enables remote access to the vehicle's information (speed, fuel level, acceleration) and plays a major role when it comes to topics such as vehicle monitoring, fleet management, safety solutions (Car2Car communication) as well as autonomous driving. The first pilot projects in these areas are up and running.

Dominant in many market niches

The market for industrial communication and network solutions is characterised by a variety of market participants. These participants often differ a lot in terms of size, product range and strategic approach.

Depending on the market niche in which Softing uses its communication competence, the company's competitors are very different. In some of the **market niches** it addresses, Softing has been able to assume world-leading positions. For instance, the company is

- world market leader in **fieldbus diagnostic devices**. These are tools enabling the detection of faults in production plants.
- European market leader in **OPC products**. These products are used to interconnect production plants, and to enable data exchange with business software (ERP software).
- the largest independent provider of communication solutions on the basis of the **Foundation Fieldbus** standards. Today, this is the de facto standard for new installations and Softing is the dominating technology enabler – Softing's components have been integrated in more than half of the globally registered devices which are used in these plants.
- a major provider of tools used to evaluate faults in a vehicle's electronic systems.
- one of the few global providers of wireless devices for vehicle diagnostics in cars and trucks (more than 80,000 diagnostic devices worldwide). In addition to reading the fault memory, vehicle diagnostics are used to read a vehicle's data such as the fuel level.
- **technology leader** in the diagnosis of copper and fibre optic networks in data centres and office installations thanks to the acquisition of Psiber Data GmbH in 2014 (today: IT Networks), and is one of the few providers able to measure cables with a CAT 8 specification.

High barriers to entry

The high entry barriers to market entry result from

- **high technological complexity:** The complex business environment in which Softing is active necessitates a thorough technological knowledge. It is especially this technical complexity of the products which is a major barrier to market entry in the two segments.
- **low proportion of costs:** The products offered by Softing are often critical to the functionality of large-scale plants. The company's products often only make up a fraction of the total costs of a large-scale project, for instance refineries, and therefore do not cause any major problems on the purchasing managers' lists.
- **reputation:** Softing can look back on a long-standing track record of delivering quality, which a new market participant would have to build up first. In view of the important roles that Softing's products play in the value creation of its customers, for instance in production, the customers' willingness to work with providers having a less proven track record is very low.
- **scale compared to many smaller players:** Compared to smaller market participants, usually engineering offices offering similar solutions, Softing has a competitive advantage owing to its scale and solid financial position. As the solutions integrated in plants and products typically have a long life, customers prefer those customers who are thought to have the potential to survive on the market in the long term.

Participation in standardisation bodies

By actively participating in national and international standardisation bodies such as Foundation Fieldbus, ASAM or ISO, Softing is playing an active part in the development of the standards. Softing has also been an active long-time member of the OPC foundation and has been responsible for the maintenance and care of all OPC communication protocols and certification tests since an agreement for deeper cooperation was signed in 2014. All of the above enables Softing to identify developments and trends at an early stage and to position itself for them in good time.

Growth / Financials

- The number of connected devices in industrial plants is structurally growing driven by topics such as **Industry 4.0 and Internet of Things (IoT).**
- Advancing **electrification and connecting of cars** as well as autonomous driving lay the basis for further growth.
- The number of control units in cars is growing by ca. 7% p.a. and reflects the increasing complexity in vehicles.
- Further increase in diversity of models in the automotive industry drives sale of development tools.
- IT Networks' targeted growth of more than 50% (+EUR 5 m) over the next three years contributes to high visibility on growth.

Revenue growth

Product and market-related decline in revenue of the past few years…

While Softing is small when measured by the size of the markets it addresses, fluctuations in demand but also the lifecycle of individual products can have an impact on Softing's sales growth. The organic sales development of the last two years has been influenced by several factors:

- **2015:** Lower investments of the oil and gas industry in which Softing has a strong positioning with Foundation Fieldbus products had an adverse effect. Additionally, the sales development of devices for CAT 8 cable testers initially had lagged behind expectations after the acquisition in 2014. Some hardware products (VCI) in the Automotive segment had reached the end of their lifecycle.
- **2016:** the production in the electrical industry stagnated on the back of declining orders in the Eurozone. Softing did not remain unaffected by this development in industrial automation either. Furthermore, US subsidiary OLDI received fewer development orders because of the US manufacturing industry difficult operating development. The completion of comprehensive development projects in the **Automotive Electronics** segment had tied up R&D capacities so that developers and automotive experts could not be assigned to revenue-generating customer projects.

Segment growth

in EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Industrial							
Sales Industrial	26.5	46.9	58.7	57.6	67.0	70.4	73.9
yoy	0.7%	77.1%	25.1%	-1.8%	16.3%	5.0%	5.0%
EBIT Industrial	2.3	1.7	2.2	4.2	6.2	6.6	7.5
margin	8.6%	3.6%	3.8%	7.2%	9.3%	9.4%	10.2%
Automotive							
Sales Automotive	26.1	27.6	23.6	22.8	17.0	18.7	20.0
yoy	12.9%	6.0%	-14.4%	-3.4%	-25.5%	9.7%	7.2%
EBIT Automotive	3.9	4.2	3.3	3.0	-0.2	1.2	1.3
margin	15.1%	15.3%	13.8%	13.1%	-0.9%	6.4%	6.6%
Consolidated							
Sales	52.6	74.5	82.3	80.4	84.0	89.0	95.0
yoy	6.4%	41.8%	10.4%	-2.3%	4.4%	6.0%	6.7%
EBIT	6.2	5.9	5.5	7.2	6.0	7.8	8.8
margin	11.8%	7.9%	6.6%	8.9%	7.2%	8.8%	9.3%

Sources: Softing (reported data); Warburg Research (estimates)

…has been largely overcome

Softing's Q1 reflected a solid start to the year. This was driven by the **Industrial Automation segment**, which benefited from a strong business improvement in factory automation.

- Demand was strong across all customer groups within the **factory automation business** and in the two main regions, Europe and the USA. Strong demand from the USA reflects a better sentiment now the uncertainties in connection with the presidential election have been removed.
- **IT Networks,** which also belongs to this segment, has grown by over 20% driven by cable-based technology. Reaching EUR 15m within the next three years (+50% compared to 2016), the market launch of products to plan wireless networks and disclose mistakes in these networks on basis of the new 802.11 ac standard should contribute to future growth. Thus, IT Networks has the potential to become a separate segment going forward.

Recent results

in EUR m	Q1/17	Q1/17e	Δ WRe	Q1/16	yoy	2017e	2016	yoy
Sales	**19.8**	18.0	10.0%	**17.9**	10.6%	84.0	80.4	4.4%
EBITDA	1.5	1.7	-11.8%	1.9	-20.4%	11.2	12.3	-8.3%
margin	*7.6%*	*9.4%*		*10.5%*		*13.4%*	*15.2%*	
EBIT	0.5	0.6	-16.7%	0.7	-29.5%	6.0	7.2	-15.7%
margin	*2.5%*	*3.3%*		*4.0%*		*7.2%*	*8.9%*	
Industrial	16.0	13.0	23.1%	12.6	27.0%	67.0	57.6	16.3%
Automotive	3.8	5.0	-24.0%	5.3	-28.3%	17.0	22.8	-25.5%
Order entries	21.8			17.7	23.2%			
Book-to-bill	1.1			1.0	11.4%			

Sources: Softing (reported data), Warburg Research (estimates)

The **Automotive** segment reflected the same situation as in the previous quarters: The completion of comprehensive development projects has tied up R&D capacities so that developers and automotive experts could not be assigned to revenue-generating customer projects. The corresponding R&D-related expenses had a negative impact on earnings. However, these F&E developments serve as a preparation for further growth and are likely to be monetised in the next few quarters.

As a result of the strong start to the year, management has **raised it revenue target for the current year to some EUR 85m (previously >EUR 80m)**, which underlines our unchanged estimates of EUR 84m. The EBIT target of up to EUR 6m was confirmed.

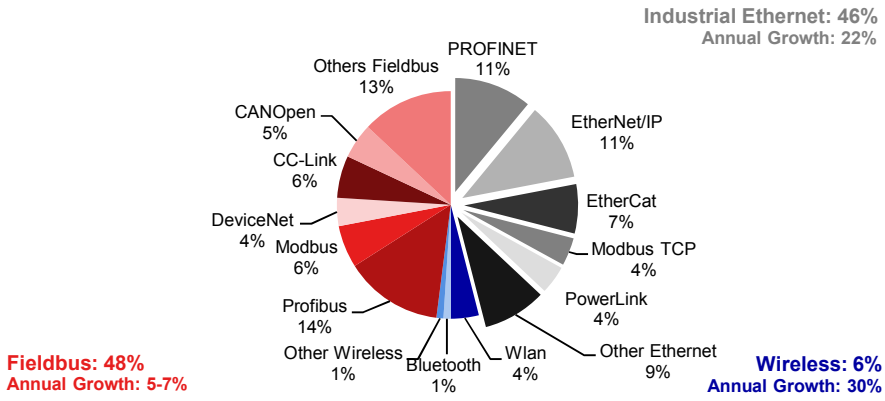
The **order backlog** of EUR 14.6m (+50% yoy) enhances the visibility for the next quarters.

Growth in the process industry (this business is part of the Industrial Automation segment) will provide additional tailwind from Q4. **The return to (double-digit) organic growth significantly supports the sentiment.**

Diversity of standards brings about complexity, number of connected nodes is growing

In the past, automation companies developed proprietary standards to address different areas of application. At the same time, these standards were meant to create a "lock-in" effect. This explains today's diversity in communication standards existing in industrial automation. They lead to heterogeneous systems and thus to an increasing complexity of the communication systems.

Fieldbus networks still dominating and growing by 5-7% p.a.



Sources: Gefran, IMS Research, HMS Networks, Warburg Research

When looking at the number of installed nodes in factory automation, Fieldbus is still the most widely used technology in the world, accounting for 66% of the market. The number of connected devices/nodes is growing by **ca. 5-7%** p.a. The main reasons for annual growth are simplicity, tradition and the reliability of the Fieldbus technology.

The new industrial facilities are predominantly equipped with Industrial Ethernet networks. At a growth **in excess of 20%** the market develops at a faster pace than the Fieldbus technology, but will not replace it, since the end customers are less prepared to migrate to this technology. The main reasons for the strong growth of Industrial Ethernet are the better performance and the integration into the office network.

The wireless technologies account for 4% of the overall industrial network market. These technologies are mainly driven by the Internet of Things, as it enables access to new automated structures and is increasingly used to interconnect and control machines, primarily because data can be easily accessed via smartphones and tablets.

This situation particularly benefits specialised providers such as Softing, the solutions of which also allow interoperability of devices made by different manufacturers. These providers can participate in the structural growth of interconnected production and process systems in the form of rising revenues. Given that Softing's solutions are exclusively aimed at the network structure, i.e. at the interconnectivity of different devices, the company benefits from an increasing number and complexity of the devices planned to be interconnected.

Conclusion: Softing's revenues in industrial automation are expected to grow at a rate of 7%, i.e. more or less proportionately to the number of nodes. Softing's solutions around cable testers (CAT 8 and expansion in cable testers of lower categories) also offer growth opportunities.

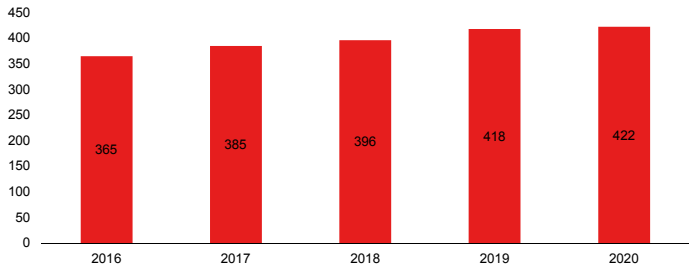
Growing complexity of electronics and networking of cars

The products offered by Softing are not directly integrated into the car, but are used, for instance, in the development of control units, prototype testing or in services. For this reason, the revenue development does not depend on the number of cars sold. Growth is rather driven by…

…the rising number of models offered by vehicle manufacturers

The different models often require different control units or control units that are identical but have a somewhat different coding. As in past, the model diversity resulting from the increasing penetration of different market segments is expected to rise going forward, delivering positive momentum to demand for development tools and thus driving Softing's growth.

Car model numbers of European car manufacturers



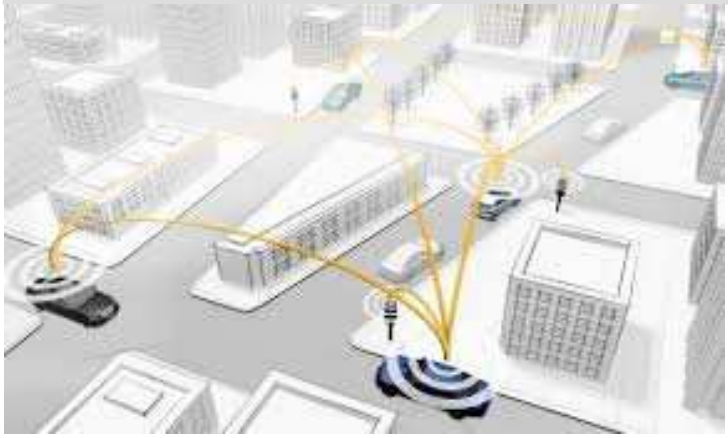
Source: Bertrandt

…the growing complexity of automotive electronics

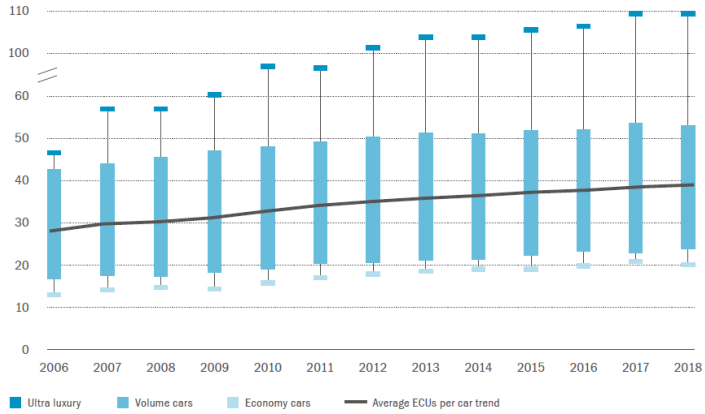
The higher number of driver assistance systems, the development of autonomous vehicles and the development of electric drives increases the degree of electrification in vehicles. The number of sensors and control units in the car has already increased significantly in the past. For instance, the number of control units in a premium car has doubled from ca. 50 to ca. 100 in the past ten years, reflecting **growth of 7% p.a.**

As a result of the autonomous car but also due to an improving safety level thanks to car2car communication and the remote access to vehicle data, for instance in fleet management, vehicles will see a higher degree of connecting with the environment (Car2X communication). This will only be possible by accessing vehicle data with the help of data communication protocols.

Connecting of cars is growing



Rising number of control units reflects electrification



Sources: Mercedes Benz, Roland Berger

Increasing use of standards

Access to electronic control units (offboard communication), analyses of data traffic between the control units in a car (onboard communication) and vehicle diagnostics are very complex in technical terms. This is aggravated by the fact that in the past vehicle manufacturers have developed **proprietary systems** for the communication of the control units that do not work with compatible data formats. Consequently, development expenses and costs are high.

Therefore, there is a strong trend towards a standardisation and opening of communication standards, especially in areas that do not offer any differentiation potential for the automotive manufacturer. **This development provides increasing opportunities for specialised companies like Softing** which offer solutions around measurement, testing and diagnostics based on open standards.

The company has a strong positioning in ODX data exchange in vehicle diagnostics and has increasingly developed products around connected cars over the last two years. These products are expected to be completed by the end of Q2 and should gradually contribute to revenues thereafter.

Conclusion: We assume that the need for solutions in diagnostics, measuring and testing will increase at a similar rate because of the growing complexity in cars. This is expected to be reflected in Softing‘s growth in this segment.

Diagnostics app as a potential driver of growth and earnings

Softing has launched an automotive diagnostics app for aftersales services. The app is offered at a substantially lower price than existing solutions (ca. EUR 120-300 for the software product and ca. EUR 80 for the necessary hardware component) and covers most the applications in workshops.

At present, the solution is geared towards Audi models. An expansion to other manufacturers should offer significant growth opportunities. Against this background, there seems to be an enormous potential:

- Volkswagen, for instance, has ca. 1,100 service partners in Germany alone, and Daimler's number is similar.
- We assume that Softing would be able to sell its products to ca. 50k service partners worldwide. Consequently, the contract workshops alone offer revenue potential of EUR 10m that would be recurring because of annual updates.
- The product's margin strength offers an upside of more than 50% to our EBITDA estimates.

We believe that addressing independent workshops would offer an even greater potential.

Diagnostics app

Source: Softing

Earnings growth

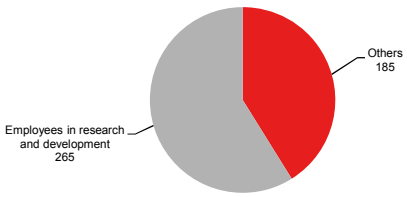
Softing has already achieved attractive double-digit margins in the past. As the revenue trend in industrial automation – and most recently in the Automotive Electronics segment - had been somewhat restrained in 2015 and 2016, as mentioned above, EBT has come under pressure. Going forward, particularly

- the absence of development expenses in the Automotive segment (EUR 3m, a part of which is currently capitalised) as well as
- economies of scale

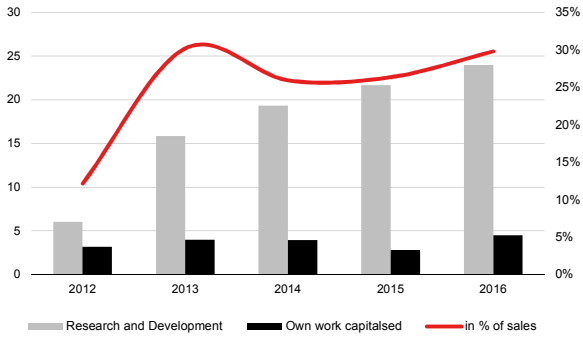
are expected to contribute to a positive margin trend

Economies of scale should mainly take effect in development. They account for a major part of Softing's expenses.

Cars becoming increasingly more connected



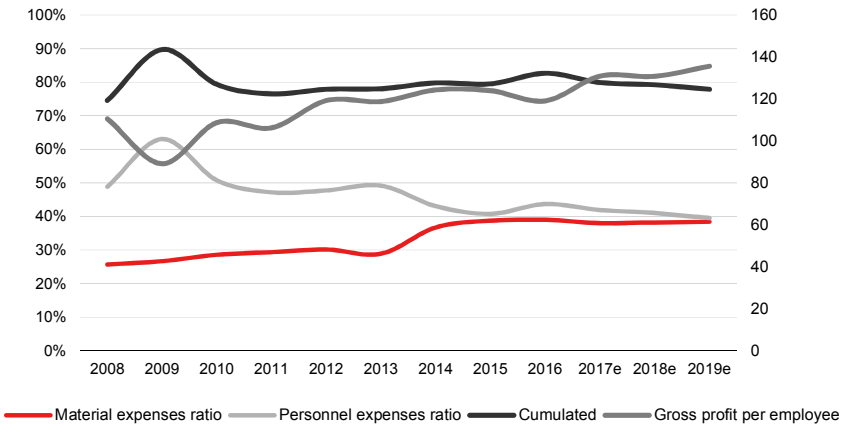
Extensive development activities



Sources: Softing, Warburg Research

Furthermore, Softing's P&L has been characterised by a growing share of hardware in the past years. Historically, Softing was strongly focused on services and has successively expanded the share of own products. This is also reflected in the development of cost-of-materials ratio.

P&L reflects focus on products



Sources: Softing, Warburg Research

In addition to economies of scale and the discontinuation of amortisations from purchase price allocations, another margin expansion is possible through

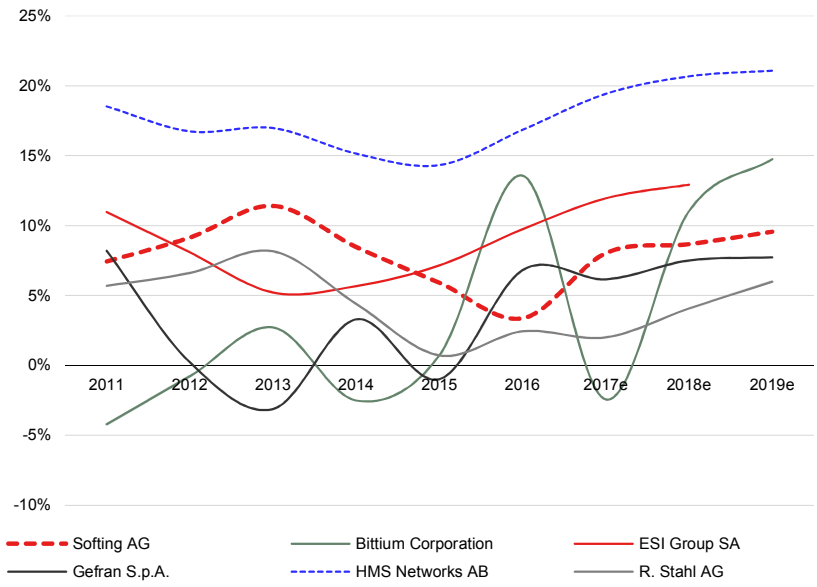
- **greater value creation:** Softing will aim to not only offer electronics but also the corresponding applications for some products (e.g. VCIs).
- **a change in product mix:** Softing intends to shift away from pure hardware sales and focus more on the development of higher-margin software with a correspondingly rising share in total sales. This is illustrated, for instance, by the diagnostics app for customers in the Automotive segment.

Both factors provide medium-term potential for a margin expansion.

A peer group comparison reveals further potential for margin growth

Even though the company's comparability is restricted because of different markets addressed and products offered, a comparison of the EBIT margins shows that based on our estimates there is further potential for margin increases when compared to competitors, especially to the "closest comparable", HMS Networks.

EBIT margins in a comparison



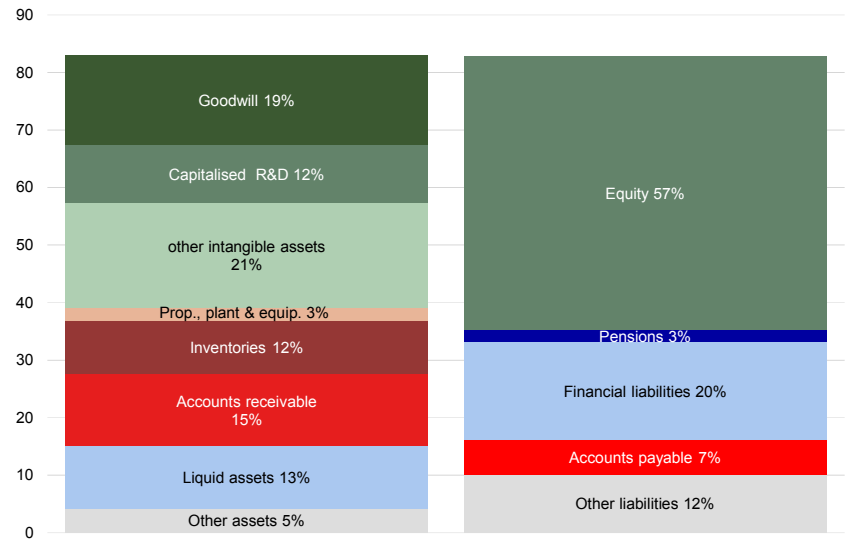
Sources: FactSet, Warburg Research

Returns have passed the trough

- **Capital** is mainly tied in intangible assets, which reflects the history of acquisitions and Softing's intensive R&D activities
- **Economies of scale** result particularly from an increasing revenue level.
- While historically the company did not earn the cost of capital, its dynamic revenue growth combined with economies of scale led to an **improvement of the ROCE** which should continue to grow.

Solid balance sheet

2016 balance sheet



Sources: Softing, Warburg Research

A solid balance sheet is an important prerequisite to be perceived as a solid partner in business with customers. With a figure of almost 60% Softing has a comfortable **equity ratio**.

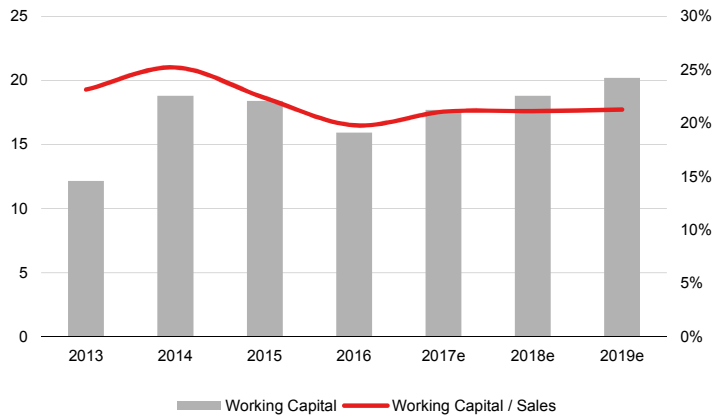
Goodwill and intangible assets: However, the high equity ratio is somewhat diminished by intangible assets.

- A great deal of **goodwill** relates to OLDI (EUR 7.6m) as well as IT Networks/Psiber (EUR 5.2m).
- **Other intangible assets** amounted to EUR 18m at the end of 2016, with a significant part being related to a customer relationship between OLDI and Rockwell Automation in the context of the Rockwell Automation Encompass Partner Program.
- **Own work capitalised** of EUR 10m reflects Softing's high degree of development activities.

Lower investment intensity: The percentage of property, plant and equipment of only ca. 3% of the balance sheet total illustrates the business' low investment intensity. On the one hand this is because Softing has outsourced part of its production. On the other hand, this is also due to the products' high complexity, which rather necessitates intellectual capital.

Working capital: There are only few financial resources tied up in **working capital**. It accounts for ca. 20% of revenue and is more or less constant over time.

Working capital



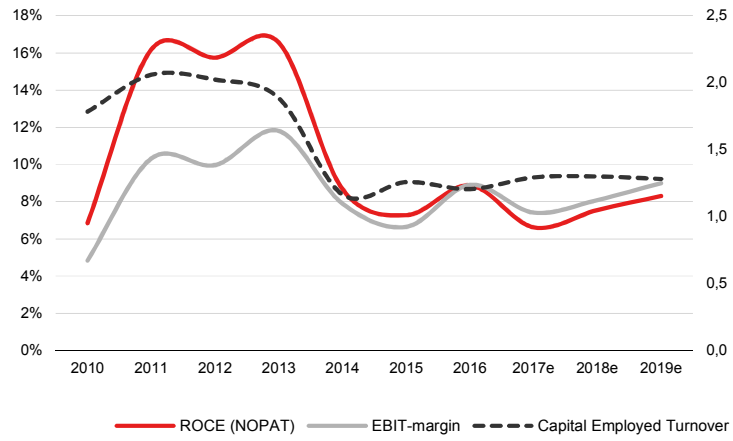
Sources: Softing, Warburg Research

Solid financial situation: Softing's net debt was EUR 6m at the end of 2016, corresponding to a net gearing of 12.7%. Off-balance sheet obligations and pension liabilities: Off-balance sheet obligations do not play a significant role. At the end of 2016, the (non-discounted) liabilities under rental and lease agreements over the next 5 years amounted to ca. EUR 4m.

Economies of scale expected to lead to increasing returns

In the past, Softing has already generated attractive returns on the capital employed, which were much higher than the cost of capital. Because of a decrease in the operating margin, an increase in the capital employed due to the acquisitions of Psiber and OLDI and the resultant **amortisations from purchase price allocations** returns dropped again in 2014 and 2015. In 2016, the ROCE was positively impacted by a one-off (purchase price liability for OLDI no longer applies).

Return look set to improve



Sources: Softing, Warburg Research

Thanks to an improvement of the operating margin, which is primarily due to a higher revenue level, combined with a reduction of the amortisations from the purchase price allocations, the ROCE is expected to return to an attractive level.

Valuation

- **The price target of EUR 14 is based on a DCF model.**
- The **FCF Value Potential** indicates a value of EUR 12, but does not sufficiently recognise future growth.
- The **peer group comparison** on the basis of EV/EBIT multiples points to an upside of 50-80%. Softing's return to dynamic growth should result in an even higher upside.

DCF model

The **price target of EUR 14** is based on a DCF model with the following underlying assumptions:

2017-2019e revenue growth at a CAGR of 6% is the result of

- the structural growth in the market for communication solutions addressed by Softing as well as the advancing internationalisation of business activities.
- continued dynamic growth in the Industrial Automation segment.
- the return to growth in the Automotive Electronics segment.

Based on these growth assumptions, the company is approaching a long-term growth rate of 2%.

Disproportionate earnings growth:

- In 2017e, we expect an EBIT margin of 7.4%.
- In the subsequent years, the EBIT margins should gradually increase to ca. 9% in 2019 on the back of economies of scale, an increase in revenues and a recovery of the revenue contributions in the Automotive Electronics segment.
- A comparison with HMS Networks shows that a significantly higher margin level is possible as well. This provides scope for a further increase in estimates.

Cost of capital:

A beta of 1.25 in combination with the assumption of a target debt ratio of 16% and lower (after-tax) cost of debt of currently below 3% leads to a WACC of 7.4%.

Outcome: On the basis of the assumptions above the DCF model yields a price target of EUR 14.

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	
Sales	84.0	89.0	95.0	99.9	104.5	108.7	112.6	116.1	119.3	122.2	124.7	127.1	129.6	
Sales change	*4.4 %*	*6.0 %*	*6.7 %*	*5.2 %*	*4.6 %*	*4.0 %*	*3.5 %*	*3.1 %*	*2.7 %*	*2.4 %*	*2.1 %*	*1.9 %*	*2.0 %*	*2.0 %*
EBIT	6.0	7.8	8.8	9.0	9.4	9.8	10.1	10.4	10.7	11.0	11.2	11.4	11.7	
EBIT-margin	*7.2 %*	*8.8 %*	*9.3 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	
Tax rate (EBT)	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	
NOPAT	4.2	5.5	6.2	6.3	6.6	6.8	7.1	7.3	7.5	7.7	7.9	8.0	8.2	
Depreciation	5.2	4.9	4.9	6.5	6.8	7.1	7.3	7.5	7.8	7.9	8.1	8.3	8.4	
in % of Sales	*6.2 %*	*5.5 %*	*5.2 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	
Changes in provisions	0.1	0.2	0.0	-0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Change in Liquidity from														
- Working Capital	1.8	1.1	1.4	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	
- Capex	5.6	5.7	5.7	6.7	7.0	7.3	7.5	7.8	8.0	8.2	8.4	8.5	8.7	
Capex in % of Sales	*6.7 %*	*6.4 %*	*6.0 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	2.1	3.7	4.0	4.7	5.5	5.8	6.1	6.4	6.7	6.9	7.1	7.3	7.4	8
PV of FCF	2.1	3.5	3.4	3.8	4.1	4.1	4.0	3.9	3.8	3.6	3.5	3.3	3.2	63
share of PVs	8.24 %			34.08 %										57.68 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	16.00 %	Financial Strength	1.25
Cost of debt (after tax)	2.1 %	Liquidity (share)	1.25
Market return	7.00 %	Cyclicality	1.25
Risk free rate	1.50 %	Transparency	1.25
		Others	1.25
WACC	**7.37 %**	**Beta**	**1.25**

Valuation (m)

Present values 2029e	46		
Terminal Value	63		
Financial liabilities	17		
Pension liabilities	2		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	11	No. of shares (m)	7.0
Equity Value	**101**	**Value per share (EUR)**	**14.55**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	1.25 %	1.50 %	1.75 %	**2.00 %**	2.25 %	2.50 %	2.75 %
1.47	8.4 %	11.24	11.46	11.70	11.96	12.24	12.54	12.87
1.36	7.9 %	12.25	12.53	12.82	13.14	13.49	13.87	14.29
1.30	7.6 %	12.82	13.13	13.46	13.82	14.21	14.64	15.11
1.25	7.4 %	13.44	13.78	14.15	**14.55**	15.00	15.48	16.03
1.20	7.1 %	14.11	14.49	14.90	15.36	15.86	16.42	17.04
1.14	6.9 %	14.84	15.27	15.74	16.25	16.83	17.46	18.18
1.03	6.4 %	16.52	17.07	17.67	18.35	19.11	19.96	20.93

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.47	8.4 %	9.42	10.27	11.11	11.96	12.80	13.65	14.49
1.36	7.9 %	10.40	11.31	12.23	13.14	14.06	14.97	15.89
1.30	7.6 %	10.95	11.91	12.86	13.82	14.77	15.72	16.68
1.25	7.4 %	11.56	12.56	13.55	**14.55**	15.55	16.55	17.55
1.20	7.1 %	12.22	13.27	14.32	15.36	16.41	17.45	18.50
1.14	6.9 %	12.96	14.06	15.16	16.25	17.35	18.45	19.55
1.03	6.4 %	14.69	15.91	17.13	18.35	19.57	20.79	22.01

- The cyclical components of the business activity and the low liquidity of the share raise capital costs.

Free cash flow value

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF Potential" – a FCF "ex growth" figures – which assumes unchanged working capital and pure maintenance capex. A value indication is derived by discounting the "FCF Potential" of a given year with the weighted costs of capital. The fluctuating value indications on the basis of different years add a timing element to the DCF model (our preferred valuation tool).

Earnings: The FCF for 2019 indicates a value of **EUR 12**, signalling moderate upside without the consideration of further growth.

Free Cash Flow Value Potential

	in EUR m	2013	2014	2015	2016	2017e	2018e	2019e
	Net Income before minorities	4.3	3.8	4.5	5.7	4.2	5.5	6.2
+	Depreciation + Amortisation	3.2	4.2	5.3	5.1	5.2	4.9	4.9
-	Net Interest Income	-0.1	-0.3	-0.3	-0.2	0.0	0.0	0.0
-	Maintenance Capex	3.9	4.0	3.3	4.2	4.2	4.3	4.3
+	Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
=	**Free Cash Flow Potential**	**3.7**	**4.3**	**6.7**	**6.8**	**5.2**	**6.1**	**6.8**
	Free Cash Flow Yield Potential	6.8 %	3.6 %	6.6 %	7.5 %	6.5 %	7.8 %	9.0 %
	WACC	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %
=	**Enterprise Value (EV)**	**53.7**	**119.1**	**101.6**	**90.0**	**79.9**	**77.8**	**75.6**
=	**Fair Enterprise Value**	**49.6**	**58.5**	**90.8**	**92.2**	**70.8**	**82.5**	**92.1**
-	Net Debt (Cash)	6.1	6.1	6.1	6.1	5.3	3.1	0.9
-	Pension Liabilities	2.2	2.2	2.2	2.2	2.3	2.5	2.5
-	Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-	Market value of minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+	Market value of investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
=	**Fair Market Capitalisation**	**41.3**	**50.2**	**82.5**	**83.9**	**63.2**	**76.8**	**88.7**
	No. of shares (total) (m)	7.0	7.0	7.0	7.0	7.0	7.0	7.0
=	**Fair value per share (EUR)**	**5.93**	**7.22**	**11.86**	**12.05**	**9.08**	**11.04**	**12.75**
	premium (-) / discount (+) in %					-12.5 %	6.4 %	22.9 %

Sensitivity Fair value per Share (EUR)

	10.37 %	3.87	4.79	8.08	8.22	6.13	7.61	8.92
	9.37 %	4.41	5.42	9.07	9.23	6.90	8.51	9.92
	8.37 %	5.08	6.21	10.30	10.47	7.86	9.62	11.17
WACC	**7.37 %**	**5.93**	**7.22**	**11.86**	**12.05**	**9.08**	**11.04**	**12.75**
	6.37 %	7.05	8.54	13.91	14.13	10.67	12.90	14.82
	5.37 %	8.58	10.35	16.72	16.98	12.86	15.45	17.68
	4.37 %	10.82	12.99	20.82	21.14	16.06	19.17	21.83

- Capitalised own work is a significant element of the capex.

Peer group comparison

The peer group valuation includes small caps from the automation technology sector.

A comparison of Softing's valuation with peers is of limited relevance. This is due to diverging target markets, customers and market capitalisations. HMS Networks is the closest comparable to Softing. However, HMS Networks does not have any relevance in the automotive sector.

Bittium Oyj (FIN)

Employees: ca. 620

Bittium is specialised in software and hardware solutions for the wireless industry. The company's solutions are used in industrial and building automation and in radio technology.

ESI Group (F)

Employees: ca. 1,200

ESI Group is a solutions provider for the virtual prototyping of product developments, where the company relies on CAD and CAE software data. The solutions are applied in the production industry, in different stages of the product development spanning from design to assembly. The company is a competitor in automotive diagnostics.

Gefran (I)

Employees: ca. 900

Gefran supplies the automation market with products in the areas of sensor, drive and control technologies. The range of services includes components for automation and entire automation systems.

HMS Networks AB (S)

Employees: ca. 470

HMS Networks is a provider in the sector of industrial communication in automation technology. The company develops solutions for the exchange of information between different devices and components. The range of products includes the major industrial fieldbus and Industrial Ethernet communication networks. Business activities span from embedded products and gateways to remote device management solutions. The company is the closest comparable among the companies presented here.

R. Stahl (D)

Employees: ca. 1,800

R. Stahl is a provider of explosion-proof switching devices, switches, lamps, controls and complete systems. The company mainly addresses the gas and oil industry as well as the chemical and pharmaceutical markets. Given this focus, R. Stahl is a possible customer for Softing.

S&T (D)

Employees: ca. 3,700

In addition to providing IT solutions such as embedded technologies, Internet 4.0 and Internet of Things technologies, S&T offers a broad product range. This includes workplace end devices, S&T servers and storage for data and print solutions via embedded & industry PC to network & security products. The embedded systems are used in various industrial sectors such as automation, medication, railway, energy management, security or multimedia.

The overview below shows the consensus estimates of the peer group which are used as basic data for the valuation comparison.

Basic data of the peer group valuation

Company	LC	Price	MC	EV	EPS			Sales			EBITDA			EBIT		
		in LC	in LC m	in LC m	17e	18e	19e	17e	18e	19e	17e	18e	19e	17e	18e	19e
Bittium Oyj	EUR	6.24	222.1	162.1	-0.03	0.24	0.36	63.2	78.2	88.1	7.1	18.1	20.0	-1.5	8.6	13.0
ESI Group	EUR	56.96	341.6	380.0	1.47	1.88	2.25	143.0	156.0	169.3	18.0	21.1	24.9	15.6	19.3	22.0
Gefran SpA	EUR	8.95	128.9	141.6	0.32	0.35	0.40	127.0	134.0	142.0	15.0	16.2	17.5	8.0	8.7	9.5
HMS Networks AB	SEK	404.00	4,728.7	5,149.4	13.72	16.47	18.75	1,165.5	1,310.0	1,453.0	270.0	314.5	351.0	226.5	271.0	306.5
R Stahl AG	EUR	39.00	251.2	221.6	0.32	1.06	1.29	284.3	299.3	313.3	18.9	24.7	27.6	5.7	12.2	14.4
S&T AG	EUR	12.61	616.7	686.1	0.46	0.61	0.79	707.0	781.5	1,057.0	44.3	56.6	81.4	29.9	43.3	58.7
Softing	**EUR**	**11.00**	**76.6**	**84.2**	**0.61**	**0.78**	**0.89**	**84.0**	**89.0**	**95.0**	**11.2**	**12.7**	**13.7**	**6.0**	**7.8**	**8.8**

Sources: Bloomberg, Warburg Research

As a result of the capitalisation of R&D expenses made by Softing and peer companies, and the consequent write-downs, we believe the EV/EBIT multiple has the larger significance in the peer group comparison.

Based on the estimated EBIT for 2018 and 2019 this multiple indicates an upside of 50-70%, thus supporting the DCF model.

Peer group comparison

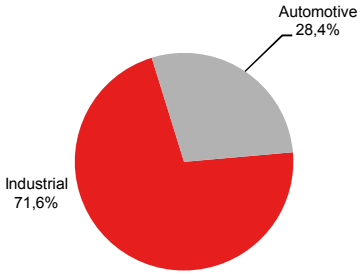
Company	LC	Price	MC	EV	P / E			EV / Sales			EV / EBITDA			EV / EBIT		
		in LC	in LC m	in LC m	17e	18e	19e	17e	18e	19e	17e	18e	19e	17e	18e	19e
Bittium Oyj	EUR	6.24	222.1	162.1	neg.	26.0 x	17.3 x	2.6 x	2.1x	1.8 x	23.0 x	9.0 x	8.1x	neg.	18.8 x	12.5 x
ESI Group	EUR	56.96	341.6	380.0	38.7 x	30.4 x	25.4 x	2.7 x	2.4 x	2.2 x	21.1x	18.0 x	15.3 x	24.4 x	19.7 x	17.3 x
Gefran SpA	EUR	8.95	128.9	141.6	28.0 x	25.6 x	22.4 x	1.1x	1.1x	1.0 x	9.4 x	8.7 x	8.1x	17.7 x	16.3 x	14.9 x
HMS Networks AB	SEK	404.00	4,728.7	5,149.4	29.4 x	24.5 x	21.5 x	4.4 x	3.9 x	3.5 x	19.1x	16.4 x	14.7 x	22.7 x	19.0 x	16.8 x
R Stahl AG	EUR	39.00	251.2	221.6	120.7 x	36.7 x	30.2 x	0.8 x	0.7 x	0.7 x	11.7 x	9.0 x	8.0 x	38.9 x	18.2 x	15.4 x
S&T AG	EUR	12.61	616.7	686.1	27.2 x	20.7 x	16.0 x	1.0 x	0.9 x	0.6 x	15.5 x	12.1x	8.4 x	23.0 x	15.8 x	11.7 x
Average					48.8 x	27.3 x	22.1x	2.1x	1.9 x	1.7 x	16.6 x	12.2 x	10.4 x	25.3 x	18.0 x	14.8 x
Median					29.4 x	25.8 x	22.0 x	1.8 x	1.6 x	1.4 x	17.3 x	10.6 x	8.3 x	23.0 x	18.5 x	15.2 x
Softing	**EUR**	**11.00**	**76.6**	**84.2**	**18.0 x**	**14.1 x**	**12.4 x**	**1.0 x**	**0.9 x**	**0.9 x**	**7.5 x**	**6.6 x**	**6.1 x**	**13.9 x**	**10.8 x**	**9.5 x**
Valuation difference to Median					63%	83%	78%	84%	65%	60%	131%	59%	35%	65%	71%	59%
Fair value per share based on Median					17.96	20.11	19.55	21.12	18.92	18.27	26.82	18.16	15.20	18.84	19.61	18.11

Sources: Bloomberg, Warburg Research

Company & Products

Softing develops and manufactures hardware and software for industrial automation and automotive electronics. Founded in 1979, the company today has ca. 450 employees and is based in Haar near Munich. Business activities are divided into two segments: **Industrial Automation** and **Automotive Electronics.**

Segment sales



Source: Softing

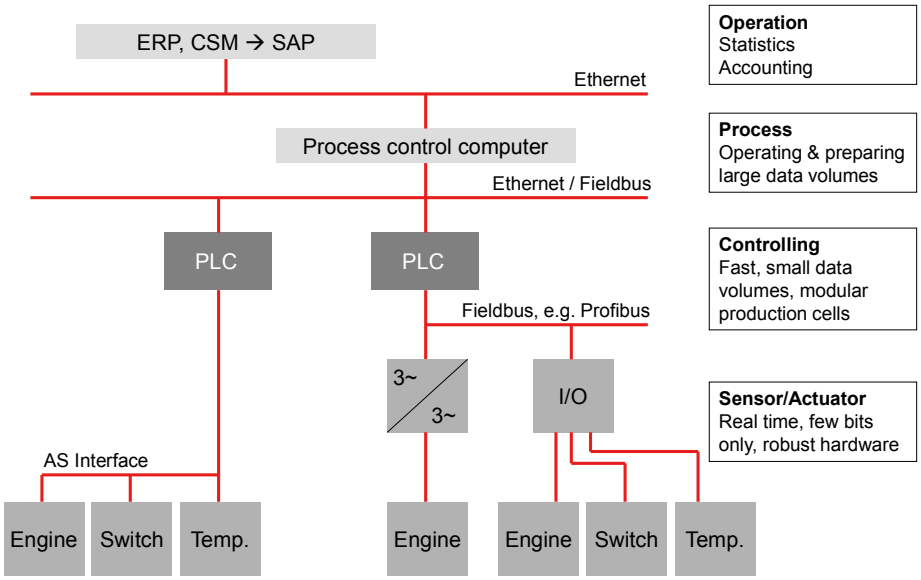
Industrial Automation

The **Industrial Automation segment** develops **components and tools** around the topics of factory and process automation. These products are delivered to OEMs in mechanical and plant engineering, the process industry as well as end customers. Unlike, for instance, Rockwell Automation, Siemens, or General Electric, Softing does not offer the automation solution itself, but is specialised in products that enable data exchange between individual electronic components used to control or monitor industrial plants.

Data exchange in industrial networks

Industrial networks are divided into different levels of hierarchy to allow for optimal data flow. The lowest level, the so-called field level, includes field devices such as sensors, actuators or actors. The data are transmitted to the ERP system via gateways in a hierarchical structure.

Schematic overview of an industrial network



Source: Warburg Research

Softing's products address different fields of application within these networks:

- data**FLOW** solutions allow for digital data flow in the field and to the PLC (control). Gateways, software and mobile tools for the configuration of networks and devices create the conditions for interconnected communications. Embedded solutions for field devices deliver field bus and industrial Ethernet connectivity.
- data**CHECK** solutions monitor and diagnose the performance of industrial communication networks, guaranteeing the reliable exchange of data and a trouble-free production.
- data**FEED** solutions connect the automation technology (AT) with systems of the information technology (IT), simply by integrating production data in manufacturing execution systems (MES) and enterprise business applications – locally or in the Cloud.
- data**THINK** solutions are based on the analysis of contextually relevant data and are customised for the optimisation of production processes and machinery.

Softing's products are used, for instance, in the control of gas turbines, for data exchange in the Pfändertunnel in Austria, or by customers from the process industry, e.g. by Wacker Chemie, or in the oil and gas industry by Baker Hughes.

Product examples

	Product / Solution	Description / Application
	Software	dataFeed OPC Suite (server + middleware) offers a full package of components for OPC communication. It enables a reliable information exchange between devices of different producers in industrial automation.
	Gateways	Gateways enable the connection between fieldbusses and ethernet-based communication systems as well as a vertical link to company-wide ERP systems. On the left side, the OPC UA gateway connects Siemens controllers with IT systems.
	Interface cards	Integration modules, chip solutions and communication software (stacks). An interface card enables data exchange between PC applications and field devices.
	Cable tester	Thorough investigation of network segments during operations by cable tests.

Sources: Softing, Warburg Research

Automotive Electronics

The Automotive Electronics segment offers hardware and software around the key topics of **diagnostics, measurement and testing**. These products are used in automobiles along the entire value chain, from development and production to customer services.

As the number of sensors and control units in vehicles grows, **diagnostics** and control of the correct functions is becoming increasingly more important. The company develops devices and software solutions for these purposes. They are used, for instance, to simulate control unit environments when testing the control unit development and vehicle integration, in production for quality assurance purposes, and later in customer service to read fault memories.

In its **Measurement business unit**, Softing supports bench test operators and measurement engineers with software and measuring devices, which are used in prototype testing amongst others. Additionally, the product offering includes particularly secure HV and measuring adapters required in **tests and inspections** of electric or hybrid vehicles with high-voltage systems. In this area, Softing also offers solutions that are developed in close cooperation with the customer.

Product examples

Automotive Electronics

	Product / Solution	Description / Application
	Diagnostic tools	Softing provides a comprehensive portfolio of applications used both for developing diagnostic processes and for carrying out diagnostics.
	Automated test solutions	Solutions to run and document systematic, structured, repeatable test and verification processes.
	Measurement technology	The complexity and range of variants in vehicle engineering are increasing steadily which leads to higher requirements for measurement techniques. Measurement technology captures physical quantities and signals, analyses measured data and generates stimuli.
	Diagnostic App	The diagnostic app turns the mobile phone into an OBD diagnostc device. The smartphone connects with the vehicle by the use of an adapter and enables the user to read out the fault memory, measured values and ECU information.

Sources: Softing, Warburg Research

Customers and distribution

Softing's products are aimed for OEM customers. As the products address different markets, the most important buyers in the two segments differ as well.

Customers in the **Automotive Electronics segment** are big automotive companies such as Daimler, Volkswagen or Porsche, suppliers, service partners, workshops or operators of test centres. Softing is represented in every major automotive market worldwide either with its own subsidiaries or through distributors.

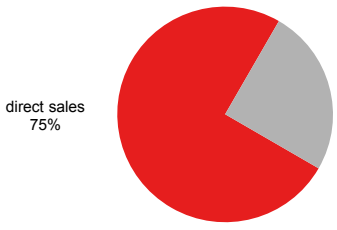
The most important customer in the **Industrial Automation segment** is Rockwell Automation, an international provider of industrial automation solutions, which, as part of the Rockwell Global Encompass programme, has a close cooperation with Softing through its US-American subsidiary OLDI. Other customers are Audi, Salzgitter Stahl and Rhein Chemie.

Sales locations – Softing Automotive

Source: Softing

The products are sold directly. Additionally, Softing relies on sales partners in more than 40 countries around the globe.

Mainly direct sale

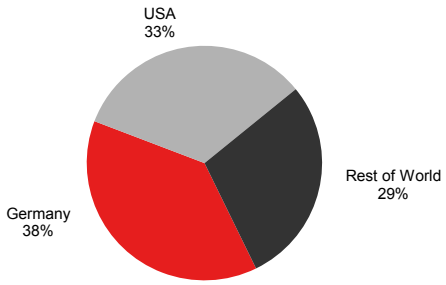


Source: Softing

Geographies

Softing generates most of its revenue in **Germany** and the rest of Europe as well as North America, and has sales offices in Austria, Italy and the USA enabling on-site service. The company's **strategic target** is to expand revenues in North America from the current 30% of group revenue to over 50% over the next few years. Growth opportunities are likely to mainly arise from the required modernisation of existing production plants in this market. Furthermore, Asiatic markets like China, Japan and Korea are gaining in importance.

Regional revenue split



Sources: Softing, Warburg Research

Production

In the production of hardware products, Softing makes increasing use of supplies from third-parties and/or outsources the production. This helps to lower the capital intensity of the business model. Possible risks are limited by long-term delivery contracts and by limiting the number of individual suppliers.

Management

Management board

Dr.-Ing. Dr. rer. oec. Wolfgang Trier (CEO) has been chief executive officer of Softing AG since April 2002. He is responsible for industrial automation, automotive electronics as well as public and investor relations. At the time he joined the company, Softing was in need of major restructuring. Thanks to the realignment of business activities, the company managed to return to profitable growth.

Ernst Homolka

Since May 2015, Ernst Homolka has been responsible for finances and human resources. His earlier career includes leading commercial and administrative functions. Additionally Mr. Homolka held the position of CFO/CEO at the Nemetschek Group from 2007-2011.

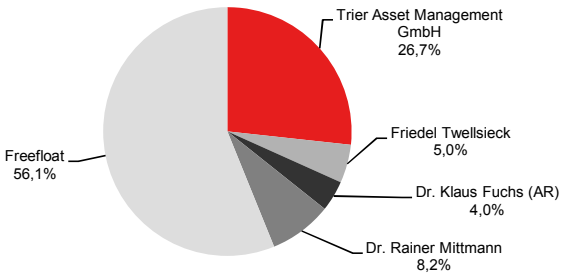
Supervisory board

Dr. Horst Schiessl (Chairman) studied business management and law at the University of Munich and works as a lawyer. He is also chairman of the supervisory board of Baaderbank and member of the supervisory board of Dussmann AG & Co KGaA. Other supervisory board members are **Dr. Klaus Fuchs** and **Andreas Kratzer**.

Shareholders

With a stake of some 27%, Trier Vermögensverwaltung GmbH & Co. KG is the largest single shareholder of Softing AG. Supervisory board member Dr. Klaus Fuchs holds some 4% of the shares. Mr. and Mrs Mittmann have a stake of ca. 8%. Following his doctorate in 1979, Dr. Mittmann was a co-founder of Softing GmbH, a managing director from the beginning, and eventually a board member.

Shareholder structure

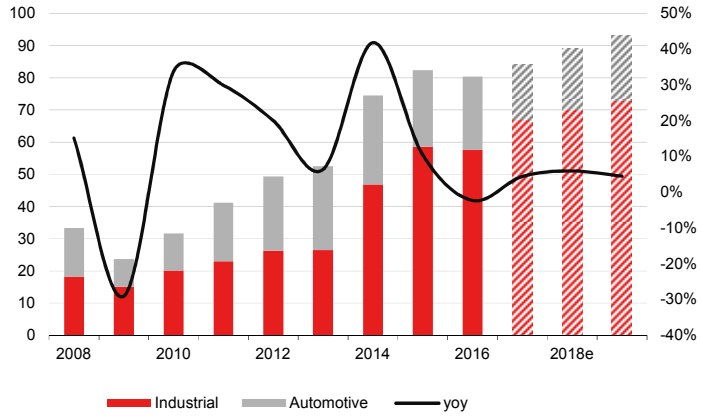


Sources: Bloomberg, Warburg Research

Company history

- In **1979**, today's Softing AG was established as an engineering office. The company went public in May **2000**.
- Softing has been present in Italy since **2000**. One year later, the company established a presence in the USA.
- In **2002**, Dr. Wolfgang Trier was appointed to the management board. At that time, the company was a restructuring case generating revenue of EUR 18.9m and EBIT of EUR -6.9m. In the subsequent years, Dr. Trier has realigned the company and has further expanded the percentage of sales attributable to products compared to consulting. This has laid the foundation for a sustainable higher profitability.
- By acquiring INAT in April **2008**, Softing has taken on a leading position in OPC products in Europe. These products serve to interconnect production plants and to connect production plants with business software.
- In **2011, the company acquired** 100% of the shares in samtec automotive software & electronics GmbH (samtec) based in Filderstadt, Germany.
- In March **2012**, Softing carried out a capital increase. 805,341 new shares were placed at a price of EUR 4.40 against a contribution in cash. The purpose of this capital increase was to finance an expected acquisition that did not happen because price expectations were too high.
- In early **2014**, Psiber was acquired. Psiber (today: iT networks) is a provider of devices for the diagnostics of Ethernet cables (copper and fibre optics), which are used in industrial automation, in office networks and in the communication backbones of data centres. This acquisition also takes account of the convergence of office and industrial networks.
- In **May 2014**, Softing acquired OLDI. In 2014, the company generated revenue of ca. USD 20m. Depending on the company's further operating development, the final purchase price is USD 20-30m. In July 2014, the capital was increased by issuing 451,000 shares at a price of EUR 16.80. The main purpose was to strengthen the financial power of Softing AG.

Dynamic sales growth accompanied by acquisitions



Source: Softing (reported data), Warburg Research (estimates)

Glossary

CAT 8. Network cables, as an indispensable accessory in modern communications technology, today are offered in several categories, ranging from categories 1 to 8. CAT 8 cables are the highest category and are suitable for 40 Gigabit Ethernet.

ECU. Electronic Control Unit or control unit, is an electronic module, which is installed in vehicles, for instance, where something has to be controlled or regulated.

Ethernet. Is a technology for Local Area Networks (LAN). It enables the data transmission in the form of protocols between devices (computers, printers) used in a local area network (LAN).

Fieldbus. A bus system connects field devices such as sensors and actuators with automation devices for communication purposes. Amongst others, it defines the sequence in which data is processed. A fieldbus helps to determine which information has to be transmitted, when, and from and to which device.

Foundation Fieldbus is one of the leading field bus technologies in process automation. A plant's start-up and operation processes are tripled thanks to digitisation.

IoT (Internet **o**f **T**hings**)**. The Internet of Things describes the increasing interconnectedness of "intelligent" machines and objects both with each other and towards the outside with the internet. This enables communication between different objects such as everyday items or devices.

ODX. Open Diagnostic Data Exchange has been developed for the diagnostics of control devices to enable a standardised data exchange between vehicle, control, and tool manufacturers.

OPC. Open Platform Communications serve to interconnect production plants, and to enable data exchange with business software (ERP software).

PLC. A programmable logic controller is a device used to control a machine or plant; it is programmed on a digital basis.

Stacks. A stack is a frequently used data structure, and is an object to store and organise data.

VCI. Vehicle Communication Interfaces are the link between a diagnostic tester and the electronics of a vehicle for data communication purposes.

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	
Sales	84.0	89.0	95.0	99.9	104.5	108.7	112.6	116.1	119.3	122.2	124.7	127.1	129.6	
Sales change	*4.4 %*	*6.0 %*	*6.7 %*	*5.2 %*	*4.6 %*	*4.0 %*	*3.5 %*	*3.1 %*	*2.7 %*	*2.4 %*	*2.1 %*	*1.9 %*	*2.0 %*	*2.0 %*
EBIT	6.0	7.8	8.8	9.0	9.4	9.8	10.1	10.4	10.7	11.0	11.2	11.4	11.7	
EBIT-margin	*7.2 %*	*8.8 %*	*9.3 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	*9.0 %*	
Tax rate (EBT)	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	*30.0 %*	
NOPAT	4.2	5.5	6.2	6.3	6.6	6.8	7.1	7.3	7.5	7.7	7.9	8.0	8.2	
Depreciation	5.2	4.9	4.9	6.5	6.8	7.1	7.3	7.5	7.8	7.9	8.1	8.3	8.4	
in % of Sales	*6.2 %*	*5.5 %*	*5.2 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	*6.5 %*	
Changes in provisions	0.1	0.2	0.0	-0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Change in Liquidity from														
- Working Capital	1.8	1.1	1.4	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	
- Capex	5.6	5.7	5.7	6.7	7.0	7.3	7.5	7.8	8.0	8.2	8.4	8.5	8.7	
Capex in % of Sales	*6.7 %*	*6.4 %*	*6.0 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	*6.7 %*	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	2.1	3.7	4.0	4.7	5.5	5.8	6.1	6.4	6.7	6.9	7.1	7.3	7.4	8
PV of FCF	2.1	3.5	3.4	3.8	4.1	4.1	4.0	3.9	3.8	3.6	3.5	3.3	3.2	63
share of PVs	8.24 %			34.08 %										57.68 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	16.00 %	Financial Strength	1.25
Cost of debt (after tax)	2.1 %	Liquidity (share)	1.25
Market return	7.00 %	Cyclicality	1.25
Risk free rate	1.50 %	Transparency	1.25
		Others	1.25
WACC	**7.37 %**	**Beta**	**1.25**

Valuation (m)

Present values 2029e	46		
Terminal Value	63		
Financial liabilities	17		
Pension liabilities	2		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	11	No. of shares (m)	7.0
Equity Value	**101**	**Value per share (EUR)**	**14.55**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	1.25 %	1.50 %	1.75 %	**2.00 %**	2.25 %	2.50 %	2.75 %
1.47	8.4 %	11.24	11.46	11.70	11.96	12.24	12.54	12.87
1.36	7.9 %	12.25	12.53	12.82	13.14	13.49	13.87	14.29
1.30	7.6 %	12.82	13.13	13.46	13.82	14.21	14.64	15.11
1.25	7.4 %	13.44	13.78	14.15	**14.55**	15.00	15.48	16.03
1.20	7.1 %	14.11	14.49	14.90	15.36	15.86	16.42	17.04
1.14	6.9 %	14.84	15.27	15.74	16.25	16.83	17.46	18.18
1.03	6.4 %	16.52	17.07	17.67	18.35	19.11	19.96	20.93

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.47	8.4 %	9.42	10.27	11.11	11.96	12.80	13.65	14.49
1.36	7.9 %	10.40	11.31	12.23	13.14	14.06	14.97	15.89
1.30	7.6 %	10.95	11.91	12.86	13.82	14.77	15.72	16.68
1.25	7.4 %	11.56	12.56	13.55	**14.55**	15.55	16.55	17.55
1.20	7.1 %	12.22	13.27	14.32	15.36	16.41	17.45	18.50
1.14	6.9 %	12.96	14.06	15.16	16.25	17.35	18.45	19.55
1.03	6.4 %	14.69	15.91	17.13	18.35	19.57	20.79	22.01

- The cyclical components of the business activity and the low liquidity of the share raise capital costs.

Free Cash Flow Value Potential

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF potential" - a FCF "ex growth" figure - which assumes unchanged working capital and pure maintenance capex. A value indication is derived via the perpetuity of a given year's "FCF potential" with consideration of the weighted costs of capital. The fluctuating value indications over time add a timing element to the DCF model (our preferred valuation tool).

in EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Net Income before minorities	4.3	3.8	4.5	5.7	4.2	5.5	6.2
+ Depreciation + Amortisation	3.2	4.2	5.3	5.1	5.2	4.9	4.9
- Net Interest Income	-0.1	-0.3	-0.3	-0.2	0.0	0.0	0.0
- Maintenance Capex	3.9	4.0	3.3	4.2	4.2	4.3	4.3
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
= Free Cash Flow Potential	**3.7**	**4.3**	**6.7**	**6.8**	**5.2**	**6.1**	**6.8**
Free Cash Flow Yield Potential	6.8 %	3.6 %	6.6 %	7.5 %	6.5 %	7.8 %	9.0 %
WACC	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %	7.37 %
= Enterprise Value (EV)	**53.7**	**119.1**	**101.6**	**90.0**	**79.9**	**77.8**	**75.6**
= Fair Enterprise Value	**49.6**	**58.5**	**90.8**	**92.2**	**70.8**	**82.5**	**92.1**
- Net Debt (Cash)	6.1	6.1	6.1	6.1	5.3	3.1	0.9
- Pension Liabilities	2.2	2.2	2.2	2.2	2.3	2.5	2.5
- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Market value of minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Market value of investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
= Fair Market Capitalisation	**41.3**	**50.2**	**82.5**	**83.9**	**63.2**	**76.8**	**88.7**
No. of shares (total) (m)	7.0	7.0	7.0	7.0	7.0	7.0	7.0
= Fair value per share (EUR)	**5.93**	**7.22**	**11.86**	**12.05**	**9.08**	**11.04**	**12.75**
premium (-) / discount (+) in %					-12.5 %	6.4 %	22.9 %

Sensitivity Fair value per Share (EUR)

	10.37 %	3.87	4.79	8.08	8.22	6.13	7.61	8.92
	9.37 %	4.41	5.42	9.07	9.23	6.90	8.51	9.92
	8.37 %	5.08	6.21	10.30	10.47	7.86	9.62	11.17
WACC	**7.37 %**	**5.93**	**7.22**	**11.86**	**12.05**	**9.08**	**11.04**	**12.75**
	6.37 %	7.05	8.54	13.91	14.13	10.67	12.90	14.82
	5.37 %	8.58	10.35	16.72	16.98	12.86	15.45	17.68
	4.37 %	10.82	12.99	20.82	21.14	16.06	19.17	21.83

- Capitalised own work is a significant element of the capex.

Valuation

	2013	2014	2015	2016	2017e	2018e	2019e
Price / Book	2.5 x	2.7 x	2.1 x	1.7 x	1.4 x	1.3 x	1.2 x
Book value per share ex intangibles	2.55	-0.57	0.00	0.55	0.93	1.45	2.10
EV / Sales	1.0 x	1.6 x	1.2 x	1.1 x	1.0 x	0.9 x	0.8 x
EV / EBITDA	5.7 x	11.8 x	9.4 x	7.3 x	7.1 x	6.1 x	5.5 x
EV / EBIT	8.7 x	20.2 x	18.6 x	12.6 x	13.2 x	10.0 x	8.6 x
EV / EBIT adj.*	11.7 x	19.2 x	15.1 x	13.7 x	13.7 x	9.0 x	7.9 x
P / FCF	72.4 x	99.3 x	20.8 x	20.9 x	34.4 x	19.3 x	18.2 x
P / E	15.0 x	26.3 x	19.4 x	14.3 x	17.0 x	13.3 x	11.7 x
P / E adj.*	15.0 x	26.3 x	19.4 x	14.3 x	17.0 x	13.3 x	11.7 x
Dividend Yield	3.4 %	1.6 %	1.2 %	1.7 %	2.1 %	2.4 %	2.9 %
Free Cash Flow Yield Potential	6.8 %	3.6 %	6.6 %	7.5 %	6.5 %	7.8 %	9.0 %

*Adjustments made for: -

Consolidated profit & loss

In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Sales	**52.6**	**74.5**	**82.3**	**80.4**	**84.0**	**89.0**	**95.0**
Change Sales yoy	6.4 %	41.8 %	10.4 %	-2.3 %	4.4 %	6.0 %	6.7 %
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	4.0	3.9	2.8	4.5	4.2	3.2	3.2
Total Sales	**56.5**	**78.5**	**85.1**	**84.9**	**88.2**	**92.2**	**98.2**
Material expenses	15.2	27.4	31.9	31.4	32.1	34.0	36.5
Gross profit	**41.3**	**51.1**	**53.2**	**53.6**	**56.1**	**58.2**	**61.7**
Gross profit margin	*78.7 %*	*68.5 %*	*64.7 %*	*66.6 %*	*66.8 %*	*65.4 %*	*65.0 %*
Personnel expenses	25.8	32.1	33.6	35.1	35.2	36.0	37.5
Other operating income	0.7	0.8	2.8	5.3	1.5	1.5	1.5
Other operating expenses	6.8	9.7	11.7	11.5	11.2	11.0	12.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	**9.4**	**10.1**	**10.8**	**12.3**	**11.2**	**12.7**	**13.7**
Margin	*17.8 %*	*13.5 %*	*13.1 %*	*15.2 %*	*13.4 %*	*14.3 %*	*14.4 %*
Depreciation of fixed assets	0.5	0.6	0.8	0.8	0.7	0.4	0.4
EBITA	**8.9**	**9.5**	**10.0**	**11.4**	**10.5**	**12.3**	**13.3**
Amortisation of intangible assets	2.7	3.7	4.5	4.3	4.5	4.5	4.5
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	**6.2**	**5.9**	**5.5**	**7.2**	**6.0**	**7.8**	**8.8**
Margin	*11.8 %*	*7.9 %*	*6.6 %*	*8.9 %*	*7.2 %*	*8.8 %*	*9.3 %*
EBIT adj.	**4.6**	**6.2**	**6.7**	**6.6**	**5.8**	**8.6**	**9.6**
Interest income	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Interest expenses	0.2	0.4	0.3	0.2	0.1	0.1	0.1
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	**6.2**	**5.6**	**5.2**	**7.0**	**6.0**	**7.8**	**8.8**
Margin	*11.7 %*	*7.5 %*	*6.3 %*	*8.7 %*	*7.2 %*	*8.8 %*	*9.3 %*
Total taxes	1.9	1.8	0.7	1.3	1.8	2.3	2.6
Net income from continuing operations	**4.3**	**3.8**	**4.5**	**5.7**	**4.2**	**5.5**	**6.2**
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	**4.3**	**3.8**	**4.5**	**5.7**	**4.2**	**5.5**	**6.2**
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	**4.3**	**3.8**	**4.5**	**5.7**	**4.2**	**5.5**	**6.2**
Margin	*8.2 %*	*5.1 %*	*5.4 %*	*7.1 %*	*5.0 %*	*6.1 %*	*6.5 %*
Number of shares, average	6.3	6.6	6.9	7.0	7.0	7.0	7.0
EPS	**0.69**	**0.58**	**0.65**	**0.82**	**0.61**	**0.78**	**0.89**
EPS adj.	0.69	0.58	0.65	0.82	0.61	0.78	0.89

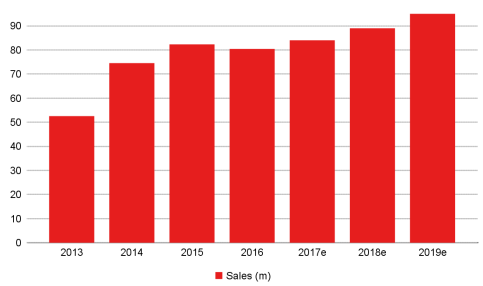
*Adjustments made for:

Guidance: 2017: revenues ca. EUR 85m; EBIT ca. EUR 6m

Financial Ratios

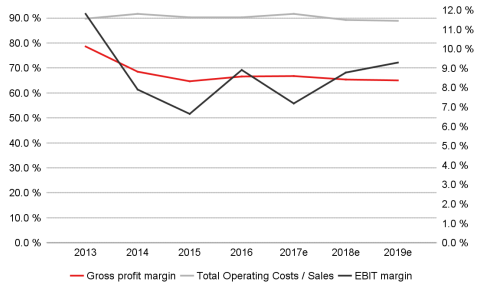
	2013	2014	2015	2016	2017e	2018e	2019e
Total Operating Costs / Sales	89.7 %	91.7 %	90.3 %	90.4 %	91.6 %	89.3 %	88.9 %
Operating Leverage	4.1 x	-0.1 x	-0.7 x	-13.5 x	-3.5 x	4.9 x	1.9 x
EBITDA / Interest expenses	45.7 x	23.3 x	33.3 x	49.4 x	112.4 x	127.0 x	137.2 x
Tax rate (EBT)	30.2 %	32.3 %	14.0 %	18.1 %	30.0 %	30.0 %	30.0 %
Dividend Payout Ratio	51.1 %	43.4 %	23.2 %	24.4 %	36.2 %	31.9 %	33.8 %
Sales per Employee	155,936	181,345	191,744	178,720	195,349	200,000	208,791

Sales, EBITDA
in EUR m



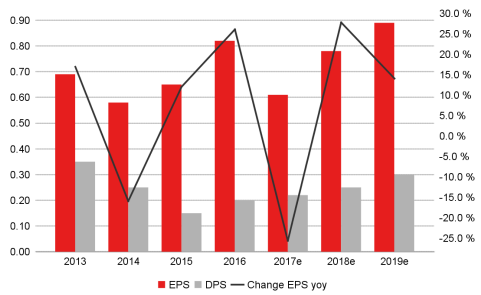
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

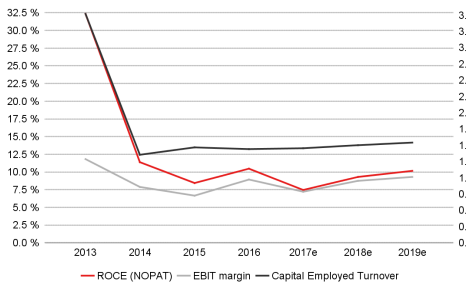
Consolidated balance sheet

In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Assets							
Goodwill and other intangible assets	9.7	41.0	42.4	43.8	43.8	43.8	43.8
thereof other intangible assets	0.5	18.1	18.9	18.2	17.1	16.1	15.0
thereof Goodwill	2.4	14.5	15.2	15.5	15.5	15.5	15.5
Property, plant and equipment	1.4	1.9	2.4	2.3	2.7	3.5	4.3
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	**11.1**	**42.9**	**44.7**	**46.0**	**46.4**	**47.2**	**48.0**
Inventories	4.7	8.7	9.3	9.2	9.5	10.1	10.8
Accounts receivable	10.0	14.2	15.4	12.6	13.3	14.1	15.1
Liquid assets	12.9	8.8	9.2	10.9	7.0	9.2	11.4
Other short-term assets	1.5	2.4	3.8	4.2	4.2	4.2	4.2
Current assets	**29.1**	**34.1**	**37.7**	**36.9**	**34.0**	**37.6**	**41.5**
Total Assets	**40.2**	**77.0**	**82.5**	**82.9**	**80.4**	**84.8**	**89.6**
Liabilities and shareholders' equity							
Subscribed capital	6.4	7.0	7.0	7.0	7.0	7.0	7.0
Capital reserve	4.4	12.3	12.3	12.3	12.3	12.3	12.3
Retained earnings	15.6	18.0	23.1	28.4	32.6	38.0	44.2
Other equity components	-0.3	-0.2	0.0	0.0	-1.6	-3.4	-5.1
Shareholders' equity	26.2	37.0	42.4	47.6	50.2	53.9	58.4
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	**26.1**	**37.0**	**42.3**	**47.6**	**50.2**	**53.8**	**58.4**
Provisions	2.3	3.9	4.1	4.7	4.9	5.4	5.4
thereof provisions for pensions and similar obligations	1.5	2.2	1.9	2.2	2.3	2.5	2.5
Financial liabilities (total)	0.2	24.8	21.2	16.9	12.3	12.3	12.3
thereof short-term financial liabilities	0.0	7.0	5.5	10.3	10.3	10.3	10.3
Accounts payable	2.5	4.2	6.3	5.9	5.1	5.4	5.7
Other liabilities	9.0	7.1	8.5	7.8	7.8	7.8	7.8
Liabilities	**14.1**	**40.0**	**40.1**	**35.3**	**30.2**	**31.0**	**31.3**
Total liabilities and shareholders' equity	**40.2**	**77.0**	**82.5**	**82.9**	**80.4**	**84.8**	**89.6**

Financial Ratios

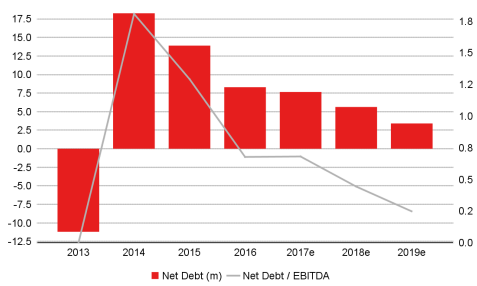
	2013	2014	2015	2016	2017e	2018e	2019e
Efficiency of Capital Employment							
Operating Assets Turnover	3.9 x	3.6 x	4.0 x	4.4 x	4.1 x	4.0 x	3.9 x
Capital Employed Turnover	3.5 x	1.3 x	1.5 x	1.4 x	1.5 x	1.5 x	1.5 x
ROA	38.9 %	8.9 %	10.0 %	12.4 %	9.1 %	11.6 %	12.8 %
Return on Capital							
ROCE (NOPAT)	32.4 %	11.4 %	8.4 %	10.5 %	7.4 %	9.3 %	10.2 %
ROE	17.9 %	12.0 %	11.3 %	12.7 %	8.6 %	10.5 %	11.0 %
Adj. ROE	17.9 %	12.0 %	11.3 %	12.7 %	8.6 %	10.5 %	11.0 %
Balance sheet quality							
Net Debt	-11.2	18.3	13.9	8.3	7.6	5.6	3.4
Net Financial Debt	-12.7	16.1	12.0	6.1	5.3	3.1	0.9
Net Gearing	-42.9 %	49.4 %	32.8 %	17.4 %	15.2 %	10.5 %	5.8 %
Net Fin. Debt / EBITDA	n.a.	159.4 %	112.0 %	49.4 %	47.6 %	24.6 %	6.6 %
Book Value / Share	4.1	5.3	6.1	6.8	7.2	7.7	8.4
Book value per share ex intangibles	2.6	-0.6	0.0	0.6	0.9	1.4	2.1

ROCE Development



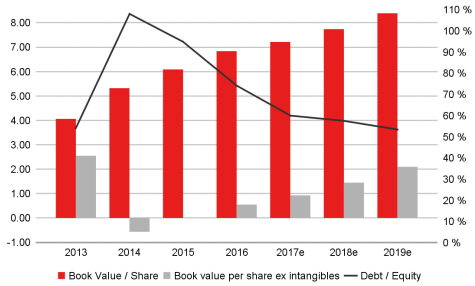
Source: Warburg Research

Net debt
in EUR m



Source: Warburg Research

Book Value per Share
in EUR



Source: Warburg Research

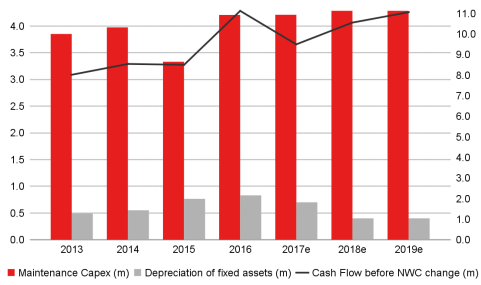
Consolidated cash flow statement

In EUR m	2013	2014	2015	2016	2017e	2018e	2019e
Net income	4.3	3.8	4.5	5.7	4.2	5.5	6.2
Depreciation of fixed assets	0.5	0.6	0.8	0.8	0.7	0.4	0.4
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	2.7	3.7	4.5	4.3	4.5	4.5	4.5
Increase/decrease in long-term provisions	-0.1	0.0	0.0	0.0	0.1	0.2	0.0
Other non-cash income and expenses	0.7	0.5	-1.3	0.3	0.0	0.0	0.0
Cash Flow before NWC change	**8.0**	**8.5**	**8.5**	**11.1**	**9.5**	**10.6**	**11.1**
Increase / decrease in inventory	-1.3	-1.6	-0.6	0.1	-0.3	-0.6	-0.7
Increase / decrease in accounts receivable	-0.2	-0.7	-1.2	2.8	-0.7	-0.8	-1.0
Increase / decrease in accounts payable	-0.4	-0.9	1.7	-0.8	-0.8	0.3	0.3
Increase / decrease in other working capital positions	-0.1	0.9	0.2	-3.7	0.0	0.0	0.0
Increase / decrease in working capital (total)	-2.0	-2.2	0.1	-1.6	-1.8	-1.1	-1.4
Net cash provided by operating activities [1]	**6.0**	**6.3**	**8.6**	**9.5**	**7.7**	**9.5**	**9.7**
Investments in intangible assets	-4.6	-3.9	-2.8	-4.5	-4.5	-4.5	-4.5
Investments in property, plant and equipment	-0.5	-1.4	-1.7	-1.1	-1.1	-1.2	-1.2
Payments for acquisitions	0.0	-21.9	-1.3	-0.9	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.2	0.8	0.0	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	**-4.9**	**-26.4**	**-5.8**	**-6.5**	**-5.6**	**-5.7**	**-5.7**
Change in financial liabilities	0.0	10.6	-1.7	-0.2	-4.6	0.0	0.0
Dividends paid	-1.7	-1.3	-1.7	-1.0	-1.4	-1.5	-1.7
Purchase of own shares	1.3	0.5	1.1	0.0	0.0	0.0	0.0
Capital measures	0.0	7.5	0.0	0.0	0.0	0.0	0.0
Other	-0.1	-0.3	-0.2	-0.2	0.0	0.0	0.0
Net cash provided by financing activities [3]	**-0.5**	**17.0**	**-2.6**	**-1.4**	**-6.0**	**-1.5**	**-1.7**
Change in liquid funds [1]+[2]+[3]	**0.6**	**-3.1**	**0.3**	**1.6**	**-3.9**	**2.2**	**2.2**
Effects of exchange-rate changes on cash	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Cash and cash equivalent at end of period	**12.1**	**9.1**	**9.2**	**10.9**	**7.0**	**9.2**	**11.4**

Financial Ratios

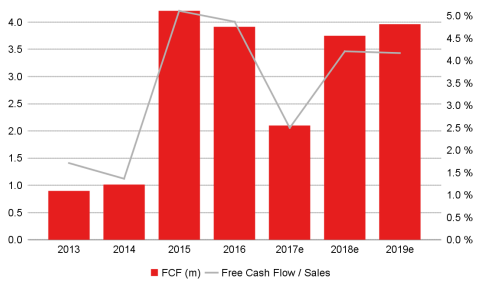
	2013	2014	2015	2016	2017e	2018e	2019e
Cash Flow							
FCF	0.9	1.0	4.2	3.9	2.1	3.7	4.0
Free Cash Flow / Sales	1.7 %	1.4 %	5.1 %	4.9 %	2.5 %	4.2 %	4.2 %
Free Cash Flow Potential	3.7	4.3	6.7	6.8	5.2	6.1	6.8
Free Cash Flow / Net Profit	20.8 %	26.7 %	93.8 %	68.6 %	49.7 %	68.7 %	64.2 %
Interest Received / Avg. Cash	1.2 %	1.5 %	0.6 %	0.6 %	1.1 %	1.2 %	1.0 %
Interest Paid / Avg. Debt	56.9 %	3.5 %	1.4 %	1.3 %	0.7 %	0.8 %	0.8 %
Management of Funds							
Investment ratio	9.8 %	7.1 %	5.4 %	7.0 %	6.7 %	6.4 %	6.0 %
Maint. Capex / Sales	7.3 %	5.3 %	4.0 %	5.2 %	5.0 %	4.8 %	4.5 %
Capex / Dep	162.5 %	125.8 %	84.1 %	110.0 %	107.9 %	116.6 %	116.6 %
Avg. Working Capital / Sales	21.3 %	20.8 %	22.6 %	21.3 %	20.0 %	20.5 %	20.5 %
Trade Debtors / Trade Creditors	396.0 %	339.9 %	244.0 %	214.0 %	260.8 %	261.1 %	264.9 %
Inventory Turnover	3.3 x	3.1 x	3.4 x	3.4 x	3.4 x	3.4 x	3.4 x
Receivables collection period (days)	70	70	68	57	58	58	58
Payables payment period (days)	61	56	72	68	58	58	57
Cash conversion cycle (Days)	73	83	54	56	67	68	68

CAPEX and Cash Flow
in EUR m



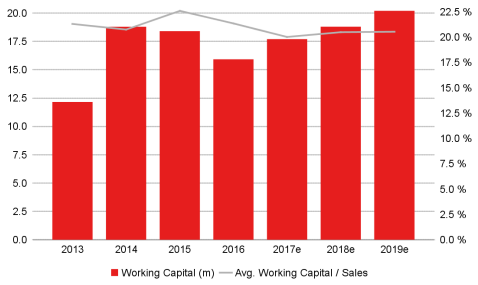
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Softing	3, 4, 5, 6	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0005178008.htm

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Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	**Buy:**	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	**Hold:**	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	**Sell:**	The price of the analysed financial instrument is expected to fall over the next 12 months.
"-"	**Rating suspended:**	The available information currently does not permit an evaluation of the company.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

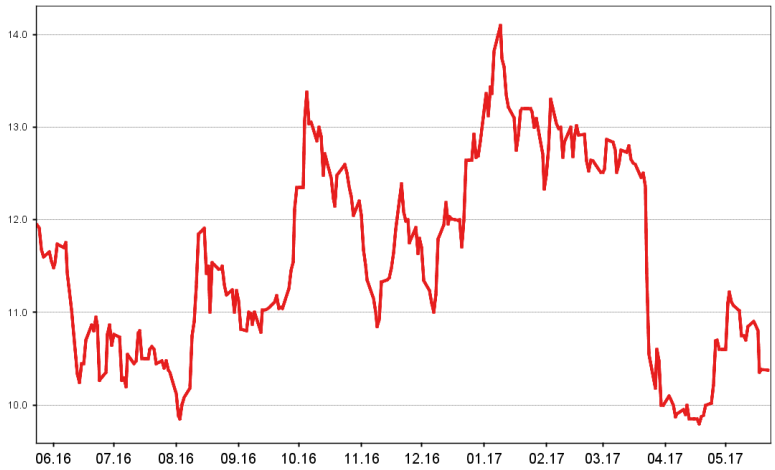
Rating	Number of stocks	% of Universe
Buy	108	55
Hold	78	39
Sell	11	6
Rating suspended	1	1
Total	**198**	**100**

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING …

… taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	28	70
Hold	9	23
Sell	2	5
Rating suspended	1	3
Total	**40**	**100**

PRICE AND RATING HISTORY SOFTING AS OF 23.05.2017



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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