ASPACOMP

PCB Technology Company

Investor presentation

Contents

- Aspocomp in brief
- Markets and growth drivers
- Competitive edge
- Financials
- Strategy
- Outlook

Appendix

Aspocomp - At the heart of your technology

Technological advantage in demanding printed circuit boards

Competitive manufacturing partner network

Net sales growth 22%

Full life-cycle from R&D to volume production

PCB
technology
design, testing
and logistics

Shortening
Time-tomarket

Own high-tech
production
site
in Finland

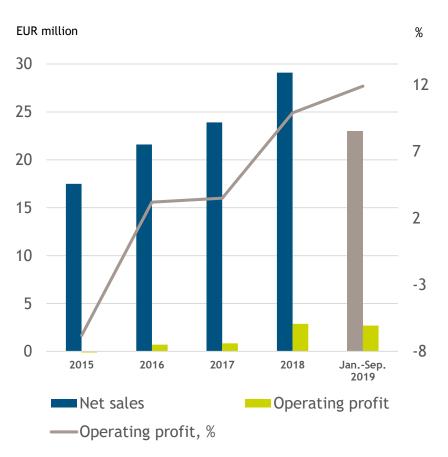
Listed on the Nasdaq Helsinki since 1999

PCB = Printed circuit board

Aspocomp in brief



Net sales and profitability



- Aspocomp develops and sells PCBs and manufacturing services, helping customers to create optimal designs and shortening time-to-market for customers' products.
- Aspocomp offers cost-efficient access to all PCB technologies together with its own production site in Oulu and strong partner network.

Aspocomp - Serving customers worldwide

Head office in Espoo, Finland

Production site in Oulu, Finland

Main markets Northern and Central Europe

Presence in Germany, UK, Switzerland and Sweden Global supply chain with partner network in Europe and China.
Customer support in Europe.

Market size for PCB \$90 billion by 2024

ucitel & Industry Arc



Markets and growth drivers Increasing use of PCBs in electronic appliances drive the industry.

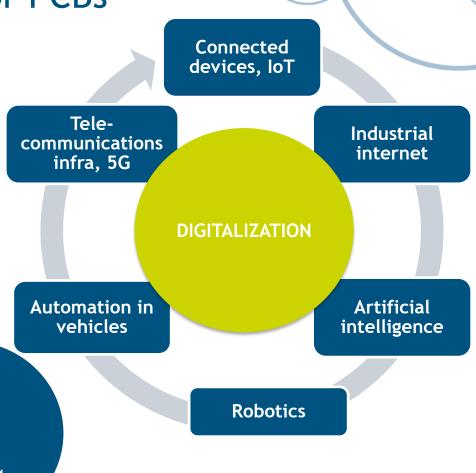
A printed circuit board (PCB) is the principal interconnection method in electronic devices. PCBs are used for electrical interconnection and as a component assembly platform in most electronic applications. Aspocomp's PCBs are used in many applications, such as telecommunication networks and devices, automotive electronics, security and medical systems, chipset development and industrial automation.

Digitalization continues to drive global growth for PCBs

 Industry growth driven by digitalization especially in vehicle automation, instruments, telecommunications infra, security, defence & aviation and advanced semiconductor technologies.

Shortening time-to-market increasingly critical

Market growth 4.3% for PCB's 2019-2024 (CAGR)*



* Source: Lucintel 9/2019

Market for PCBs growing along with smart devices, telecom infra and automation

The PCB market is expected to grow by 4.3% (CAGR) from 2019 to 2024.*

Market size is expected to reach \$89.7 billion by 2024.*

In Europe average growth rate 2.6% (CAGR) 2016-2024*

Asia Pacific is expected to remain the largest market and witness the largest growth *

Main market drivers for growth

- Advancement of internet of things
- Increased adoption of smart devices
- Wearable electronics
- Telecommunications infra and 5G
- Increased automation in industrial applications
- Advancement in automotive electronics

However, some signs of growth slowing down are visible.

Also geopolitical concerns, trade tariffs and Brexit may have an impact.

^{*}Source: Lucintel Sep. 2019



Accelerate TIME-TO-MARKET of our customers' products

Bringing added value to customers by providing PCB technology services from the R&D phase to volume production.

Focus on customers' concerns

Customers have

Complex technical PCB requirements

Need for a reliable PCB partner who can support them in all technologies and volumes

Critical time requirements



We have

- Superb technology and manufacturing knowledge from design to production
- 2) Strong world-class partner network and own production
- 3) Fast deliveries, flexibility in operations
- 4) Certified quality standards

Key Customer Segments for Aspocomp



0.3.2020 ASPOCOMP

Aspocomp's key strengths

Complete product palette from most demanding to basic PCBs according to customers needs.

Wide technology portfolio Own production in Oulu, Finland

Most challenging designs within the shortest lead-times of the industry.

World-class know-how, dedicated personnel, and capabilities for industrial scale prototyping.

Flexible production facilities and stocking system enable to quickly adapt to changes

Competitive and reliable partner network.

Long presence in Asia.

Local presence in EU countries

Strong partners and local organization in Europe and Asia

Engineering support and customer service

Comprehensive engineering support for R&D in Oulu.

Single contact point for customer service.

Logistic advantage for customers in Europe.

ISO standardized production.

Committed to adding value by serving our customers with superior PCB expertise

Aspocomp today

High-technology expertise for demanding PCBs

Serving customers by both special and volume PCBs

Own production facility in Finland and strong partner network

Our strategy

Expand services to cover PCB needs over the product's entire life cycle

Shorten time-to-market with fast deliveries

Optimize efficiency

Our targets

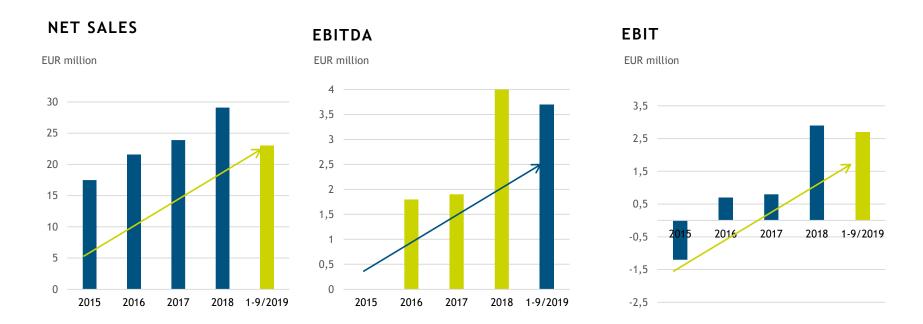
Growth

Number one partner for our customers

Financials Strong growth and profitability

Growth continued - transformation strategy successfully implemented

- Net sales increased by 12% y-o-y driven by strong demand for products
- Both net sales and profitability showed double digit growth
- Profitability remained at a good level
- Order book significantly strengthened



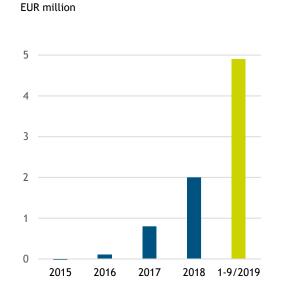
Strong financial position, equity ratio at 63.4%

- Operative cash flow significantly increased to EUR 4.9m
- Gearing remained at a good level at 19.3%

EQUITY RATIO, %



CASH FLOW FROM OPERATIONS

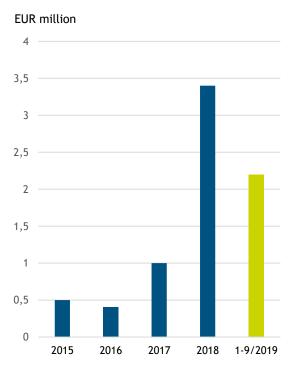


1-9/2019
Equity per share
€2.50
Earnings per share
€0.40

Investments of EUR 10 million in total in Oulu site progressing as planned

- On-going investments in Oulu to respond to the increased demand, in the first stage, to enhance the capability and, in the second stage, to increase the capacity - with the aim to optimize the product mix.
- Most part of the first stage investment will be completed by end of 2019.
- The investment is partially funded by EU 2014-2020 program.
- In 2018, investments included the acquisition of the production facility in Oulu.

INVESTMENTS



Key drivers for performance

Net sales and profitability of Aspocomp





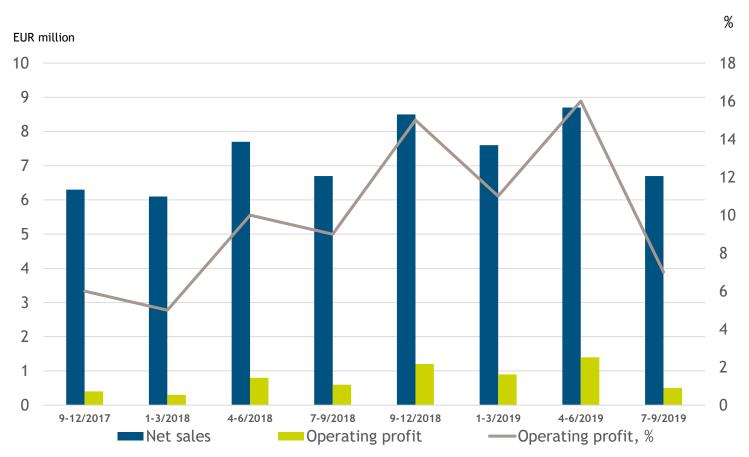
- ✓ Improved efficiency
- ✓ Improved product mix

- Long lead times of materials
- Geopolitical concerns
- European market slowing

ASPOCOMP

Quarterly performance

Quarterly net sales and profitability of Aspocomp

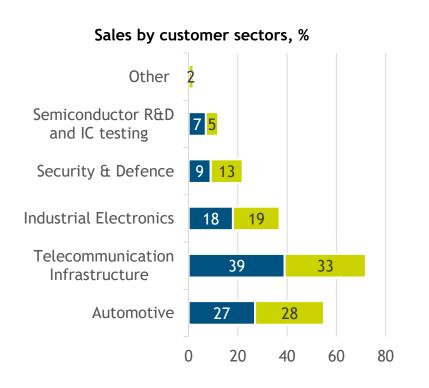


Key indicators

EUR million	1-9/2019	2018	2017
Net sales	23.0	29.1	23.9
EBITDA	3.7	4.0	1.9
Operating profit (EBIT)	2.7	2.9	0.8
% of net sales	11.9%	9.9%	3.5%
Net profit for the period	2.7	3.2	1.3
Earnings per share, EUR	0.40	0.49	0.19
Operative cash flow	4.9	2.0	0.8
Equity ratio, %	63%	57.6%	69.1%
Order book at the end of the period	4.9	2.8	2.5
Personnel	122	117	111

- Net sales grew by 12%
- Profitability improved significantly, operating profit margin 11.9%
- Operative cash flow of EUR 4.9 million, more than doubled y-o-y
- Order book at a record level at EUR 4.9 million

Telecommunication infrastructure continues as the largest customer sector





Mitigating business risks

Dependence on key customers

Short order intake, typically 1-3 months in the PCB industry

Changes in market trends

Availability of materials

- Aim to increase the number of large customers. In 2018 the five largest customers accounted for 54% (51% in 2017) of net sales.
- Aim to increase the number of customers and customer segments. Strengthen long-term customer relations.
- Own production site helps to adapt to market changes.
- Stock availability, pre-orders, and merchant stock are used to anticipate changes in material availability.



Profitable, responsible and long-term business growth is our goal

Social responsibility

- Our Code of Conduct defines the basic requirements of our business practices and guides our employees to act responsibly in their daily work.
- Our business is in line with the Social Accountability International SA8000 standard.
- We have a conflict mineral policy

Environment

- Our production plant and manufacturing partners have **ISO 14001**-certified environmental management systems and related action plans.
- We operate in accordance with the European Union's REACH Regulation.
- Our products meet the requirements of the **lead-free** soldering process and our raw material options include **halogen-free** base materials.
- We can provide our customers with detailed material reports.

Governance

• We are committed to good governance, in accordance with the legislation, the company's Articles of Association and the Finnish Corporate Governance Code.



Growth strategy

To be the number one partner for our customers.

Main Topics in current Strategy

- Aspocomp Customer Oriented Service Company
- Seeking for high growth in selected customer segments
- Expanding to new markets
- Improve operational exellence
- Target to grow in average of 10% annually and to reach minimum profitability of 7% latest in year 2022

Aspocomp - Customer Oriented Service Company

- Supports and offers Customer's all PCB needs throughout the whole lifecycle of the products
- Strong vision and knowhow in PCB technologies
 - High techology and delivery performance in operations
- Wide product and technology offering
 - Competitive Partner network
- Customer Service: Best in Class
 - Wide network in Customer organization (R&D, Sourcing, Operations, Management)



Megatrends driving our Customer Segments



- Telecommunication
 Networks
- Automotive
- Industrial Electronics
- Security- and Defence
- SemiconductorComponets Testing



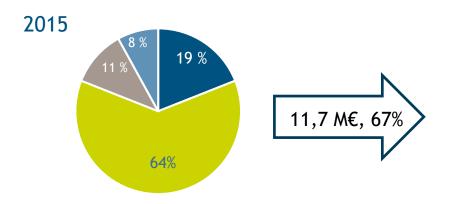
ADAS- systems

IOT, AI, Robotics

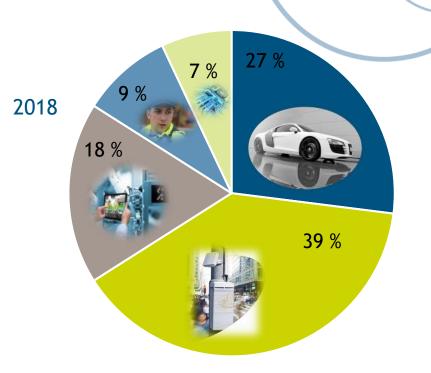
Geopolitical situation

Moore's law

Seeking for high growth in selected customer segments

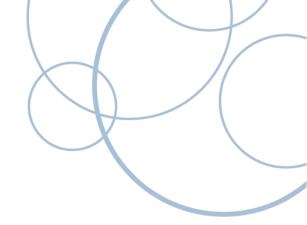


- Automotive
- Telecommunication Infrastructure
- Industrial Electronics
- Other



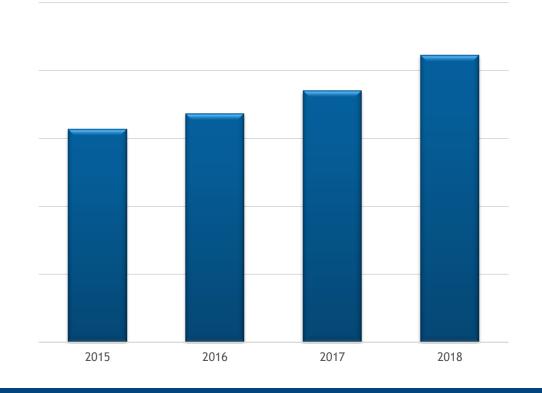
- Automotive
- Telecommunication Infrastructure
- Industrial Electronics
- Security & Defence
- Semiconductor R&D and IC testing

Increasing share of value added products in Oulu, ASP increased 14% in 2017- 2018



- Oulu manufacturing focus on technologially advanced products
- Standard products moved to partners
- 2018-9 investments focused on capability improvements. Next step is to increase the capacity.
- Target to increase Oulu revenue by 50%





Management Team







Chief Executive Officer



Antti Ojala

Business Development



Ari Beilinson

Sales and Marketing



Jari Isoaho

Chief Operating Officer



Jouni Kinnunen

Chief Financial Officer



Mitri Mattila

Chief Technology Officer

Outlook for 2019

- In 2019, net sales are expected to grow approximately 10 percent compared with 2018 and the operating result to be better than in 2018.
- In 2018, net sales amounted to EUR 29.1 million and the operating result to EUR 2.9 million.

Why to invest in Aspocomp

Profitable growth

Becoming the number one partner for our customers

Superior technical expertise

Growing market for PCB

Focus on more comprehensive customer service

Disclaimer

• Although forward-looking statements contained in this presentation are based upon what management of the company believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. These statements are not guarantees of future performance and undue reliance should not be placed on them. The company undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by applicable securities laws.

ASPOCOMP

PCB Technology Company

Thank you

ASPOCOMP

PCB Technology Company

APPENDIX

Income statement

EUR million	1-9/2019	2018
Net sales	23.0	29.1
Other operating income	0.1	0.0
Materials and services	-10.4	-13.2
Personnel expenses	-5.5	-7.7
Other operating costs	-3.5	-4.3
Depreciations and amortization	-1.0	-1.1
Operating result	2.7	2.9
Financial income and expenses	-0.1	-0.1
Profit/loss before tax	2.7	2.7
Income taxes	0.0	0.5
Profit/loss for the period	2.7	3.2

Balance sheet

EUR million	Sep. 30, 2019	Dec 31, 2018
Assets		
Non-current assets		
Intangible assets	3.2	3.3
Tangible assets	6.0	4.9
Available for sale investments	0.0	0.0
Deferred income tax assets	4.0	4.0
Total non-current assets	13.2	12.2
Total current assets	13.2	13.6
Total assets	26.4	25.8
Equity and liabilities		
Total equity	16.8	14.9
Total liabilities	9.7	11.0
Total equity and liabilities	26.4	25.8

Cash flow

EUR million	1-9/2019	2018
Profit for the period	2.7	3.2
Adjustments	0.1	0.7
Change in working capital	1.4	-1.8
Received Interest income	0.0	0.0
Paid interest expenses	-0.0	-0.1
Paid taxes	0.0	0.0
Cash flow from operating activities	4.9	2.0
Investments	-2.2	-3.4
Proceeds from sale of property, plant and equipment	0.1	0.0
Cash flow from investing activities	-2.1	-3.3
Increase in financing	0.0	4.6
Decrease in financing	-1.0	-0.6
Dividends paid	-0.8	-0.5
Cash flow from financing activities	-1.8	3.5
Cash and cash equivalents at the end of period	3.5	2.6

Aspocomp's share price performance

01.01.2019 - 24.11.2019



DIVIDEND POLICY

The company's aim is to pay an annual dividend to its shareholders.

In its annual proposal on the distribution of dividend, the Board will take into account the company's financial performance, investment and development needs, and solvency.

The targeted dividend payout ratio is at least one-third of the group's profit for the financial year.

Shareholders as of Sep. 30, 2019

Shareholders by sector



- Households 53.3%
- Companies 34.2%
- Financial and insurance institutions 12.0%
- Non-domestic organizations 0.4%
- Non-profit organizations 0.1%

		X	
	Shareholders	Shares	Owner- ship, %
1	Tiiviste-Group Oy	1,001,004	14.93%
2	Joensuun kauppa ja kone Oy	745,000	11.11%
3	Mandatum Henkivakuutusosakeyhtiö	328,861	4.91%
4	Etola Erkki	295,000	4.40%
5	Montonen Mikko	260,000	3.88%
6	K22 Finance Oy	235,000	3.51%
7	Lähdesmäki Tuomo	163,000	2.43%
8	Lahdenperä Matti	150,000	2.24%
9	Svenska Handelsbanken AB (Hall. Rek.)	136,437	2.04%
10	Nordea Henkivakuutus Suomi Oy	135,000	2.01%
	Total 10 largest	3,458,302	51.55%
	Total number of shares	6,704,505	100%