



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 17 - July 2022

NEWS FROM THE EIPC

PROFILE OF NEW MEMBER – THE EUROPEAN SPACE AGENCY

Amongst our several new members this year is the ESA, and we invited them to provide a profile of their organisation. This we are delighted to carry.

The European Space Agency (ESA) is Europe's gateway to space. Its mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world. ESA's programmes are designed to find out more about Earth, its immediate space environment, our Solar System and the Universe, as well as to develop satellite-based technologies and services, and to promote European industries. Established in 1975, we work together with our 22 Member States to push the frontiers of science and technology, and promote economic growth in Europe. The budget for 2022 is a little over 7 billion euro.

ESA has sites in several European countries. The European Space Research and Technology Centre (ESTEC) is located in Noordwijk, The Netherlands, and is the largest site and the technical heart of ESA. Most ESA projects are born here, and this is where they are guided through the various phases of development. More than 2000 specialists work here on dozens of space projects. The Materials and Processes section is responsible to provide engineering support to all ESA's projects, which includes technologies for printed circuit boards and electronic assembly.

This includes the technology development, qualification, verification and approval of associated materials and processes for their performance in the operational and environmental conditions. Engineering staff are supported by the Materials and Electrical Components laboratories, which includes sophisticated tools for analysis of electronic assemblies and exposure to simulated space environment.

ESA - European Space Agency

Stan Heltzel
Materials Engineer
Materials and Processes Section TEC-MSP

ESTEC
www.escies.org/pcb/ | www.esa.int



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 17 - June 2022

NEWS FROM AUSTRIA

AT&S increases guidance for the current financial year 2022/23

Disclosure of inside information according to Article 17 MAR

Leoben – AT & S Austria Technologie & Systemtechnik Aktiengesellschaft has essentially adjusted three of its assumptions regarding the future development within the current financial year:

- The start-up of the new production capacities at the plant in Chongqing, China, is proceeding faster than previously expected and the update of customer orders shows a higher-quality product mix, which involves higher revenue and improved margins.
- The Covid-related lockdown in Shanghai, China, had significantly lower negative effects on the Shanghai plant than expected in the company's planning so far.
- The expected exchange rate for the current year has been adjusted to 1.07 euros/US dollar (previously: 1.17 euros/US dollar) and 6.9 euros/RMB (previously: 7.5 euros/RMB).

Therefore, AT&S anticipates that revenue of roughly € 2.2 billion will be generated in the financial year 2022/23 (previously: approx. € 2 billion). The expected EBITDA margin adjusted for start-up costs will increase to 27 to 30% (previously: 23 to 26%). The assumptions regarding start-up costs (€ 75 million) and the investment volume (€ 1,250 million) remain unchanged. The outlook is based on the assumption that the global economy will not enter a recession, no direct negative financial effects of the geopolitical upheavals will result from the war in Ukraine and the Covid situation in China will not lead to any long-term production downtimes.

Press contact:

Gerald Reischl, Director Communications & Public Relations

Tel: +43 3842 200 4252; Mobile: +43 664 8859 2452; [Send an e-mail](#)

Investor Relations Contact:

Philipp Gebhardt, Director Investor Relations

Tel: +43 3842 200 2274; Mobile: +43 664 7800 2274; [Send an e-mail](#)



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter

Issue 17 - June 2022

NEWS FROM GERMANY

Virtual Annual General Meeting of Schweizer Electronic AG:

- **Majority agreement by shareholders on all agenda items**
- **70 percent of the registered share capital was represented**
- **Executive Board looks back on a challenging year and provides an outlook for the future**

The Annual General Meeting of Schweizer Electronic AG took place again in virtual form on Friday. In total, 70 percent of the registered share capital of Schweizer Electronic AG was represented.

Financial year 2021 / Outlook

In his speech, Chairman of the Executive Board Nicolas Schweizer looked back on a challenging 2021, which was a successful year overall. According to Nicolas Schweizer, the company has successfully confronted the external framework conditions of the last three years, such as the automotive and coronavirus crisis, the chip shortage and the supply chain problem.

He reported on the successful turnaround at the Schramberg plant, on order books that reached an unprecedented level and on the successful advancement of SCHWEIZER technology development. Nicolas Schweizer emphasised in particular the challenges at the Chinese plant due to the prevailing difficult framework conditions and the measures taken, the positive effects of which are to be expected from the end of the second quarter.

Despite the many uncertainties, the Executive Board confirmed the April announcement of an expected growth of 10 to 20% and an improvement in EBITDA of between -4% and +1%. Successful implementation of the profit improvement in China is crucial here. However, the main focus is on stabilising and improving the Group equity ratio, preferably through capital measures at the site in China.

Agreement on all agenda items

With a large majority, the Annual General Meeting expressed its trust in both the members of the Executive Board and the Supervisory Board for the 2021 financial year, and agreed to all proposed resolutions.

Dr Harald Marquardt, Chairman of Marquardt SE, was elected as a new member of the Supervisory Board with a majority of 99.7%.

In the subsequent meeting of the Supervisory Board, Dr Stefan Krauss was elected as Chairman of the Supervisory Board as the successor to Mr Christoph Schweizer.

Mr Christoph Schweizer resigned from the Supervisory Board at the end of the Annual General Meeting. Mr Christoph Schweizer was Chairman of the Executive Board of Schweizer Electronic AG until 2002 and, after completing his operational activities, was a member of the company's Supervisory Board, where he took on the role of Chairman for 15 years.

In view of his special merits for the company, Christoph Schweizer was appointed Honorary Chairman of the Supervisory Board.

All voting results and further information on the Annual General Meeting are available on the Internet at <https://schweizer.ag/en/investors-media/annual-shareholders-meeting>.

Contact

Schweizer Electronic AG

Elisabeth Trik

Investor Relations

Mail: ir@schweizer.ag

Pictures: [Schweizer Electronic AG | Flickr](#)

About SCHWEIZER

Schweizer Electronic AG offers the latest, cutting-edge technology and consultancy expertise in the PCB industry. Thanks to its state-of-the-art production facilities in Schramberg, Germany and Jintan, China as well as close partnerships with other technology leaders, SCHWEIZER provides individual PCB & Embedding solutions. SCHWEIZER's innovative PCB technologies are used in the most demanding applications, for example, in the Automotive, Aviation, Industry & Medical and Communications & Computing sectors, and are characterised by their extremely high quality and energy-saving and environmentally-friendly features.

The company was founded by Christoph Schweizer in 1849 and is listed at the Stuttgart and Frankfurt Stock Exchanges (ticker symbol „SCE“, „ISIN DE 000515623“).



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 17 - June 2022

NEWS FROM THE UK

Ventec Meets Demand for Taiyo LPI Solder Mask Products in Europe

Following Ventec's announcement of its exclusive distribution agreement with Taiyo, customers in mainland Europe & the UK are now guaranteed reliable, immediate and flexible access to the full colour range of Taiyo Liquid Photoimageable (LPI) Solder Mask inks. Quickest order to delivery turnaround times are guaranteed through Ventec's fully managed and controlled supply chain from its UK and Germany facilities. With comprehensive inventory availability in both locations of the full range of colours from Taiyo's PSR-4000 and PSR-4100 range, Ventec meets the increasing demand from European high mix PCB manufacturers for LPI solder mask inks in Europe.

The Taiyo PSR-4000 series and PSR-4100 (two-component, alkaline developable LPI solder mask products) are now immediately available to customers in the EMEA region in the complete range of colours: black, white, green, dark green, blue, yellow and red.

Fully stocked and fulfilled from Ventec's distribution hubs in Germany and the United Kingdom, the LPI range is supplied in pre-measured 2.8 and 1.2 kilo containers. The products are Directive 2002/95/EC and RoHS compliant and designed to be user friendly with wide processing latitudes, low odour, fast developing and good resistance to alternate metal finishes such as ENIG and immersion tin.

"With our long-term strategy to continuously invest in ownership and control of our complete sales process and supply chain, Ventec is well known for logistics excellence. Through our long-term partnership with Taiyo as their exclusive pan-European distributor and our stock capacity increase

At our distribution centres in the United Kingdom and in Germany, we are eradicating the former supply challenges for LPI solder masks products in Europe. Immediate availability from stock and flexible shipping options allow our customers controlled and reliable access to stock inventory at the level and time they require

for uninterrupted manufacturing,” says Mark Goodwin, COO EMEA and America of Ventec.

Alongside its core PCB-base material ranges, the Taiyo product availability further strengthens Ventec’s position as a leading one-stop shop for high-quality PCB materials in Europe.

Ventec International is a world leader in the production of polyimide & high reliability epoxy laminates and prepregs and specialist provider of thermal management and IMS solutions. Further information about Ventec’s solutions and the company’s wide variety of products is available at www.ventec laminates.com and/or by downloading the Ventec APP.

~~

About Ventec International Group

Ventec International is a premier supplier to the Global PCB industry. With volume manufacturing facilities in Taiwan and China and distribution locations and manufacturing sites in both the US and Europe, Ventec specializes in advanced copper clad glass reinforced and metal backed substrates. Ventec materials, which include high-quality enhanced FR4, high-speed/low-loss- & high-performance IMS material technology and an advanced range of thermal management solutions, are manufactured by Ventec using strict quality-controlled processes that are certified to AS9100 Revision D, IATF 16949:2016 and ISO 9001:2015, and are backed by a fully controlled and managed global supply chain, sales- and technical support-network. For more information, visit www.ventec laminates.com.



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 17- June 2022

ELECTRONIC INDUSTRY NEWS

The European PCB industry – a trip down memory lane - Data4PCB / Custer Consulting Group

European PCB production has for a number of years been outcompeted and outperformed by production in Asia. It's been previously documented that the prime movers were price competition and a strong outsourcing wave of the entire electronics industry in general. But how does the European PCB industry look today?

During EIPC's summer conference in Örebro Sweden, EIPC President Alun Morgan took to the stage to paint a picture of the industry as it was, and where we currently are.

Leaning on a presentation from Custer Consulting Group – with supporting data from PCB industry expert Michael Gasch of Data4PCB – Mr. Morgan presented the highs and lows of the manufacturing PCB industry in Europe.

The earliest data point in the presentation is 2015, a time when Europe had a total of 247 PCB manufacturing companies. In 2021 that number had been reduced to 171. However, it is worth pointing out that while the number of producing companies has dwindled some - 30.7%, the actual revenues when comparing the industry back 2015 and 2021 have only been reduced by -9.2%.

European PCB Production 2015 - 2021

Summary	2015	>>	2018	2019	2020	2021	20/21 Change
Revenues (million EUR)	1.815		1.921	1.764	1.513	1.648	+8,9%
Staff	16.491		16.642	15.783	14.989	15.361	+2,5%
Number of manufacturers per company size							
< EUR 2 million	109		66	43	56	57	
EUR 2 – 10 million	98		84	101	80	77	

EUR 10 – 50 million	34		46	37	31	32	
> EUR 50 million	6		6	6	5	5	
Total	247		202	187	172	171	

Source: Data4PCB / Custer Consulting Group

Looking at the European PCB production for 2021 Germany sticks out – unsurprisingly – as biggest European producer, holding 43% of the market. Austria and Switzerland together hold 19.6% of the market, while Italy holds 11.7%.

	Production (EUR million)	% of Europe
Germany	709,0	43.0%
Austria + Switzerland	322,0	19.6%
Italy	193,7	11.7%
Great Britain	139,6	8.5%
Belgium + France	123,3	7.5%
Central Europe	83,2	5.0%
Spain	40,1	2.4%
Rest of Europe	36,5	2.2%

Source: Data4PCB / Custer Consulting Group

Over the years, the actual revenues from PCBs produced in Europe have decreased. Europe recorded more revenues back in 2015 than it did in 2021 – with a high point in 2018. Although, the volume did increase in 2021 when compared to 2020, as is illustrated in the top picture.

When looking at the biggest industrial segments for European PCB manufacturers industrial electronics is one of the major ones, representing 19,6% of the market. Besides industrial electronics – which is the strongest segment in Europe – the region is also strong in Medical (9,8%), Special types (8,7%), Automotive (8,7%), Defence (8,0%) and Mobility (6,2%).

Michael Gasch provided comments on the data stating that “based on the sales result for the first four months in 2022 the total potential growth in Europe could be between 7 and 9%.”

According to the PCB industry expert, German-speaking countries may see growth between 6% and 7%. France, Belgium, Spain and Italy could grow as much as 9–10% while Central Europe could see growth between 10–13%

With this in mind, Michael Gasch believes that Europe reach a total volume of 1,750 to 1,800 million EUR this year – which would be on the same level as 2015.

However, there are a few red flags to be mindful of.

2021 was a rebound year for the electronics industry showing growth throughout many sectors. The early part of 2022 had signs of continued growth on a lower level.

In the presentation, Michael Gasch says that, with the continuation of the Russian war with Ukraine, China's COVID restrictions, the rising cost of materials and energy, and supply chain challenges; our situation is obviously not improving. This is likely to continue well into 2022 and even further into the start of 2023.

On a brighter note though, recent inflation pressure is causing interest rates to rise, this may cause a slowdown in demand and we may see some stabilisation. Semiconductors are expected to remain strong with double-digit growth. PCB growth should be around 5–8%.

China Built Your iPhone. Will It Build Your Next Car?

Gadget manufacturers are getting into the car-making business. That could shake up the auto industry, global trade, and geopolitics.

Rumours of an Apple electric car project have long excited investors and iPhone enthusiasts. Almost a decade after details of the project leaked, the Cupertino-mobile remains mythical—but that hasn't stopped other consumer electronics companies from surging ahead. On the other side of the world, people will soon be able to order a vehicle from the Taiwanese company that mastered manufacturing Apple's gadgets in China. Welcome to the era of the Foxconn-mobile.

In October 2021, Hon Hai Technology Group, better known internationally as Foxconn, announced plans to produce three of its own electric vehicles in collaboration with Yulon, a Taiwanese automaker, under the name Foxtron. Foxconn, which is best known for assembling 70 percent of iPhones, has similar ambitions for the auto industry: to become the manufacturer of choice for a totally new kind of car. To date it has signed deals to make cars for two US-based EV startups, Lordstown Motors and Fisker.

Foxconn's own vehicles—a hatchback, a sedan, and a bus—don't especially ooze Apple-chic, but they represent a big leap for the consumer electronics manufacturer. Foxconn's ambitious expansion plan also reflects a bigger shift across the auto world, in terms of technology and geography. The US, Europe, and Japan have defined what cars are for the last 100 years. Now the changing nature of the automobile, with increased electrification, computerization, and autonomy, means that China may increasingly decide what car making is.

If Foxconn succeeds in building a major auto-making business, it would contribute to China becoming an automotive epicenter capable of eclipsing the conventional powerhouses of the US, Germany, Japan, and South Korea. Foxconn did not respond to requests for an interview.

The automobile industry is expected to undergo big transformations in the coming years. An October 2020 [report from McKinsey](#) concluded that carmakers will dream up new ways of selling vehicles and generating revenues through apps and subscription services. In some ways, the car of the future sounds an awful lot like a smartphone on wheels.

That's partly why there's no better moment than now for an electronics manufacturer to try car making, says [Marc Sachon](#), a professor at IESE Business School in Barcelona, who studies the automotive industry. Electric vehicle powertrains are simpler than internal combustion ones, with fewer components and fewer steps involved in assembly. The EV supply chain is simpler to manage than the conventional supply chain, which is one of the core competencies of established carmakers. China, Sachon adds, has a strong EV ecosystem, from batteries to software, and even the manufacturing of components.

-

China is especially well positioned to lead the charge towards electrification. The country already has some of the world's most advanced battery manufacturers, including [CATL](#) and BYD, the latter of which also produces cars. Carmakers in the region may gain an edge in terms of understanding and harnessing new battery technologies simply by virtue of proximity—much in the same way as software companies benefit from being close to chip design firms.

The country is already an EV hot spot, with electric vehicle companies like [BYD](#), [NIO](#), and [Xpeng](#) increasingly challenging Tesla's market lead. One of the country's most popular cars is the [Wuling Hongguang Mini EV](#), a two-person vehicle that costs around \$5,000. Sales of electric vehicles in China have been buoyed by government subsidies and outstrip any other nation, accounting for 14.8 percent of Chinese car sales, up 169 percent year on year, according to [data from the China Passenger Car Association](#), an industry organization. EVs accounted for [4.1 percent of car sales in the US](#) in 2021, and roughly [10 percent in the EU](#).

Consumer electronics companies increasingly see the auto sector as their territory because of the growing computerization and connectivity of modern cars. Conventional automakers, who built their fortunes on vehicles that change little after they are purchased, have been slow to adapt to the new possibilities offered by software and connectivity.

Many companies recognize the opportunity to challenge the status quo. Besides supposedly exploring its own car, Apple is developing increasingly advanced automotive infotainment software. Alphabet has invested millions developing software for self-driving cars through its subsidiary Waymo. And some big tech firms are already designing the vehicles themselves—in March, Sony announced plans to build electric cars in collaboration with Honda.

But if interest is bubbling up elsewhere, it's boiled over in China. Huawei, Tencent, Alibaba, and others have agreements to develop software and services with carmakers. The Chinese smartphone maker Xiaomi announced plans last October to build four different electric vehicles, and according to some reports, rival Oppo has similar ambitions. Earlier this month, JiDU, a company created by the automaker Geely and the search giant Baidu, unveiled its first vehicle, called ROBO-1. Baidu has invested heavily in the artificial intelligence needed for autonomous driving with the encouragement of the Chinese government, another reason why it sees itself as a budding carmaker.

“Electric vehicles and autonomous driving coming together really creates opportunities for companies like Foxconn, like Xiaomi and so on,” says Gregor Sebastian, an analyst at the Mercator Institute for China Studies, a think tank focused on the relationship between China and Europe.

A study by Sebastian and colleagues published in May concludes that the shift to electric vehicles could have profound implications for EU-China trade in the years to come, potentially turning the bloc from a net exporter to a net importer of vehicles. Tesla makes the most electric cars in China for export, but domestic manufacturers are catching up. NIO, which is headquartered in Shanghai, is reportedly looking to establish manufacturing capacity in the US and Europe. And Foxconn has said it plans to manufacture cars at a large plant in Ohio formerly operated by GM.

On the face of it, Foxconn seems well placed to start making cars. But there are important challenges to overcome.

Foxconn's expertise lies in harnessing human labor, sometimes at great cost, to assemble intricate devices. This is fundamentally different from the heavily automated work of automotive manufacturing, and Foxconn has struggled to introduce more robots to its production lines in the past. Electric vehicles are easier to manufacture than conventional ones, with fewer parts needed for assembly, but producing a sufficient number of cars to a sufficient standard is notoriously difficult, with margins for most carmakers razor thin.

Mike Juran, CEO of Altia, a company that makes software for developing graphical user interfaces for cars and other products, also warns that cars are fundamentally different from smaller devices that don't need to transport human beings at high speed. Juran points to the complexity of touchscreen interfaces in some new vehicles. "These are not smartphones on wheels," he says. "These are cars with technology that should be appropriate for the task at hand, which is, in fact, life and death."

Foxconn's stock price hardly seems buoyed by its auto plans, having dropped by almost 20 percent over the past year, in line with the rest of the Taiwan stock market. The company may see car making as a way to broaden the range of things it manufactures and fatten its margins, but the effort will require significant investment in new manufacturing capacity, and it could take years to get right. Foxconn's chairman, Young Liu, has said that the company plans to build a battery supply chain in Kaohsiung, Taiwan. And while China's car industry is the largest in the world, sales of new vehicles dropped 11 percent year on year in April 2022, according to the China Passenger Car Association, and few Chinese companies have found success abroad.

Car making is a big leap for Foxconn and other tech companies because it is so specialized and difficult, says Bruce Belzowski, managing director at Automotive Futures Group, a consulting firm, who has studied China's automotive industry. "In some ways it makes sense, in others it doesn't," he adds. Belzowski suggests that tech companies looking to get into car making in China may hope for technical breakthroughs that vault Chinese companies ahead of overseas rivals, such as a big increase in battery capacity. But such breakthroughs are not guaranteed.

There may not be as many companies looking to outsource their car manufacturing in the way that smartphone companies do, either. Shortages of chips and raw materials have sent auto manufacturers scrambling to own more of the supply chain, not less, says Sebastian. He also warns that concerns over data privacy and market access could complicate efforts by Chinese companies to export vehicles and to build and sell vehicles in the EU and US. "They obviously bring other things to the table, but ultimately I do believe that they have to fight an uphill battle," he says.

If, however, Foxconn can make the leap, and as China becomes a growing auto industry force, then incumbents elsewhere had better look out. Sachon foresees a future when Foxconn churns out millions of standardized cars at low cost that are then differentiated via software—much like the rectangles of plastic and glass that have proliferated at the lower end of the smartphone boom. And if Apple does end up offering an automobile, Foxconn could be ideally positioned to manufacture it. "If Foxconn can pull this off, established OEMs will have an extremely hard time competing price-wise," he says.



Issue 17 - June 2022

NEWS FROM THE IPC

North American PCB Industry Sales Up 3.4 Percent in May

IPC releases PCB industry results for May 2022

IPC have announced the May 2022 findings from its North American Printed Circuit Board (PCB) Statistical Program. The book-to-bill ratio stands at 1.03.

Total North American PCB shipments in May 2022 were up 3.4 percent compared to the same month last year. Compared to the preceding month, May shipments rose 1.1 percent.

PCB year-to-date bookings in May were down 9.2 percent compared to last year. Bookings in May fell 10.3 percent from the previous month.

“PCB demand remains strong and is showing some signs of normalization,” said Shawn DuBravac, IPC’s chief economist. “Order flow is slowing and shipments are picking up, bringing the book-to-bill into a more normal range.”

Detailed Data Available

Companies that participate in IPC’s North American PCB Statistical Program have access to detailed findings on rigid PCB and flexible circuit sales and orders, including separate rigid and flex book-to-bill ratios, growth trends by product types and company size tiers, demand for prototypes, sales growth to military and medical markets, and other timely data.

Interpreting the Data

The book-to-bill ratios are calculated by dividing the value of orders booked over the past three months by the value of sales billed during the same period from companies in IPC's survey sample. A ratio of more than 1.00 suggests that current demand is ahead of supply, which is a positive indicator for sales growth over the next three to twelve months. A ratio of less than 1.00 indicates the reverse.

Year-on-year and year-to-date growth rates provide the most meaningful view of industry growth. Month-to-month comparisons should be made with caution as they reflect seasonal effects and short-term volatility. Because bookings tend to be more volatile than shipments, changes in the book-to-bill ratios from month to month might not be significant unless a trend of more than three consecutive months is apparent. It is also important to consider changes in both bookings and shipments to understand what is driving changes in the book-to-bill ratio.

IPC's monthly PCB industry statistics are based on data provided by a representative sample of both rigid PCB and flexible circuit manufacturers selling in the USA and Canada. IPC publishes the PCB book-to-bill ratio by the end of each month.

North American EMS Industry Up 9.4 Percent in May

IPC releases EMS industry results for May 2022

IPC have announced the May 2022 findings from its North American Electronics Manufacturing Services (EMS) Statistical Program. The book-to-bill ratio stands at 1.35.

Total North American EMS shipments in May 2022 were up 9.4 percent compared to the same month last year. Compared to the preceding month, May shipments rose 0.6 percent.

EMS bookings in May increased 7.0 percent year-over-year and decreased 6.8 percent from the previous month.

“Recent results for the EMS industry continue to suggest strained supply chains. Orders have grown 11.2 percent, outpacing shipment growth of 7 percent,” said Shawn DuBravac, IPC’s chief economist. “The book-to-bill has moderated from last year’s highs but remains elevated as businesses continue to work on key components.”

Detailed Data Available

Companies that participate in IPC’s North American EMS Statistical Program have access to detailed findings on EMS sales growth by type of production and company size tier, order growth and backlogs by company size tier, vertical market growth, the EMS book-to-bill ratio, 3-month and 12-month sales outlooks, and other timely data.

Interpreting the Data

The book-to-bill ratios are calculated by dividing the value of orders booked over the past three months by the value of sales billed during the same period from companies in IPC’s survey sample. A ratio of more than 1.00 suggests that current demand is ahead of supply, which is a positive indicator for sales growth over the next three to twelve months. A ratio of less than 1.00 indicates the reverse.

Year-on-year and year-to-date growth rates provide the most meaningful view of industry growth. Month-to-month comparisons should be made with caution as they reflect seasonal effects and short-term volatility.

Because bookings tend to be more volatile than shipments, changes in the book-to-bill ratios from month to month might not be significant unless a trend of more than three consecutive months is apparent. It is also important to consider changes in both bookings and shipments to understand what is driving changes in the book-to-bill ratio.

IPC's monthly EMS industry statistics are based on data provided by a representative sample of assembly equipment manufacturers selling in the USA and Canada. IPC publishes the EMS book-to-bill ratio by the end of each month.

[NEWS FROM THE TPCA](#)

Consumer electronics weaken PCB factories but are optimistic about the growth of servers, Netcom and automotive boards

June 27, 2022

TPCA

Due to the War between Russia and Ukraine, the lockdown of the epidemic and the inflationary mood, the consumer electronics market has been pumped out, and mobile phones, panels and laptop assembly plants have successively warned, of which the price of PCB photoelectric panels is more depressed, but servers, Netcom and automotive boards, the industry is more optimistic about the product performance in the second half of the year.

Due to the main panel factory in the front of the production capacity has not been reduced, resulting in supply more than demand, dragging down the panel quotation fell endlessly, Taiwan-based photoelectric plate factory Zhichao, Jianding, Han Yubo cautious about this change, Jianding has reduced the proportion of orders for photoelectric boards, and actively respond to the demand for high-rise digital netcom boards and automotive boards in the second half of the year.

Jianding photoelectric board revenue in the first quarter of this year was 17.36 billion yuan, accounting for 10.9%, lower than the average of 13% in 2021, Jianding supervisor pointed out that the added value of photoelectric board and NB board products is not high, and the transfer of production capacity to other applications and HDI is the established direction. In the first quarter, HDI product shipments accounted for 35.2% of the overall revenue, pushing up the annual revenue growth of 10% and the target of 68-70 billion yuan remained unchanged.

Zhichao will complete the installation of new equipment at Suining Plant in Sichuan in May, and it is expected that after the full production capacity is opened, it will increase the production capacity by 600,000 feet per month; However, in response to the weakening demand of the global panel industry, countermeasures have been taken, and the new production capacity of the second phase of the Sichuan Suining plant, which was originally scheduled for the third quarter of this year, has been postponed.

Since the proportion of Zhichao's revenue is as high as 7-80% of NB, panel photoelectric panels, Zhichao's supervisor pointed out that in the past 2 years, due to the external environment to stimulate the high growth of demand abnormal phenomena, the current panel industry is only restoring normal business cycles, Zhichao will be cautious to face. Zhichao also actively extended from the NB board to the server board, and the results were slowly emerging.

Han yu bo in addition to the supply of NB board, but also the production of panel control board, due to the decline in the price of the panel, resulting in the price of photoelectric board depressed, Han Yu Bo supervisor pointed out that in the past two years due to the World Cup football, Olympics and other events to stimulate panel sales, the industry returned to normal prosperity, Han Yu Bo will no longer expand the photoelectric board to receive orders, the initial estimate of the proportion of photoelectric board revenue has dropped to 2%.

In the second half of 2022, PCB boom, in addition to the decline in demand for photoelectric boards, including Samsung's non-apple mobile phone camp under ultra-high inventory pressure, non-apple mobile phone board order kinetic energy is also bearish, the industry mostly expects rigid demand for automobiles, high-frequency transmission servers, and netcom board demand can drive revenue.

(News source: Juheng Network)



The European Institute for the PCB Community

EIPC SPEeDNEWS

Issue 17-July 2022

International Diary

2022

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

14 September

KPCA Korea

21-23 September

Korea

EIPC @ FED Conference

29-30 September

Bamberg, Germany

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

19 October

TPCA Taiwan

26-28 October

Taiwan

EIPC @ Electronica

15-18 November

Munich, Germany

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

30 November