



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 3 – February 2024

NEWS FROM THE EIPC

Geleen – The Netherlands – 5th February 2024. EIPC is most honoured to have been able to select our new Board of Directors for 2024 – 2025. It is a simple fact that without the voluntary input and contributions to the Institute from the industry worthies shown in the list below we would not be able to support the PCB industry as we do. We are indebted to them all.

Board:

Antti Ojala – Aspocomp

Jean-Claude Roth - CCI Eurolam

Michele Stampanoni – Cicor Group

Jon Custer- Custer Consulting

Hubert Zimmermann- Dyconex

Emma Hudson – Emma Hudson Technical Consultancy

Stan Heltzel – ESA/ESTEC

Thomas Michels - Ilfa GmbH

Johan Pellicaan - MacDermid Alpha

Martyn Gaudion – Polar Instruments

Oldrich Simek – Pragoboard

Rico Schlüter – RS-PCB Solutions

Stuart Down – Taiyo America

Alun Morgan – Ventec Group

The officers were chosen by the Board;

President: Alun Morgan-Ventec Group

Vice-President: Rico Schlüter-RS-PCB Solutions

Vice-President: Thomas Michels-Ilfa GmbH

Treasurer: Emma Hudson- Emma Hudson Technical Consultancy

The appointments are also shown on our website: [Board - EIPC Association](#)



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NEWS FROM AUSTRIA

AT&S prepares for the upcoming market recovery despite a challenging environment

- AT&S prepares for the upcoming market recovery despite a challenging environment
- Revenue declines to €1,205million in the first three quarters of 2023/24 (PY: €1,489million)
- Adjusted EBITDA margin of 26.6% within the range forecast
- Important milestone: opening of first plant in Kulim, Malaysia
- Getting prepared for market recovery in the second half of 2024
- Guidance confirmed for financial year 2026/27, adjusted for 2023/24

Leoben – AT&S operated in a challenging market environment in the first three quarters of the financial year 2023/24. “After a strong second quarter, demand in the third quarter was once again relatively weak in some market segments. The markets for mobile devices and industrial applications weakened significantly. While notebooks and PCs saw a slight recovery, the market for servers slowed down further.

In this environment, we continued to push our efficiency programmes, which we intensified a year ago, to ensure a sustainable optimisation of our company’s cost structure,” says CEO Andreas Gerstenmayer. “In the second half of 2024, a general market recovery is expected in our industry. We can consequently assume that capacity utilisation at our existing plants will improve and we are prepared for the rebound of the market with the go-live of our plant in Kulim, which is scheduled for the end of the year. We will therefore have a good chance to participate in a market recover with

our improved cost structures,” Gerstenmayer comments on the company’s perspective.

In comparison with the strong prior-year period, consolidated revenue declined by 19% to € 1,205 million in the first three quarters of the financial year 2023/24 (PY: € 1,489 million). Adjusted for currency effects, consolidated revenue fell by 16%. This development was primarily driven by the fundamental changes in the economic environment. With a less favourable product mix and higher price pressure, revenue in the Electronics Solutions segment fell short of the strong figures of the prior-year period. Due to lower demand resulting from high inventory levels, in particular for servers, as well as an unfavourable product mix and increased price pressure, the Microelectronics segment also recorded a decline.

EBITDA decreased by 36% from € 416 million to € 268 million in the first three quarters. The reduction in earnings is primarily attributable to the decline in consolidated revenue. In order to counter effects such as price pressure and inflation, which result from the currently difficult market situation, AT&S already initiated comprehensive cost optimisation and efficiency programmes in the past financial year. These programmes already made a higher contribution in the first three quarters of the financial year 2023/24 than originally planned. As was the case with revenue, both segments were unable to match the EBITDA figures of the previous year. In the Electronics segment, EBITDA decreased by 39% to € 176 million (PY: € 289 million) due to lower revenue and a less favourable product mix.

In the Microelectronics segment, EBITDA declined for similar reasons as well as due to higher start-up costs at the plants in Kulim, Malaysia, and Leoben, Austria, decreasing by 29% from € 128 million to € 91 million.

Currency fluctuations had a positive influence of € 2 million on earnings. Adjusted for start-up costs in Kulim, Malaysia, and Leoben, Austria, EBITDA amounted to € 321 million (PY: € 452 million), which corresponds to a decrease by 29%.

The EBITDA margin amounted to 22.2% (EBITDA margin adjusted for start-up costs: 26.6%), thus falling short of the prior-year level of 28.0% (EBITDA margin adjusted for start-up costs: 30.4%). The margin was supported by the cost optimisation and efficiency programmes and once again by the positive development in the Medical segment – a sector for which AT&S continues to assess strategic options. Depreciation and amortisation increased by € 2.0 million to € 205 million (17.0% of revenue) due to additions to assets and technology upgrades. EBIT fell from € 214 million to

€ 63 million. Finance costs – net declined from € 37 million in the previous year to € -41 million primarily due to a change in currency effects on cash and cash equivalents. Profit for the period declined from € 221 million to € 7 million, leading to a decline in earnings per share, after interest for hybrid capital, by € 5.49 from € 5.33 to € -0.16.

Key figures

| in € million | Q3 2023/24 | Q3 2022/23 | Change in % | Q1-3 2023/24 | Q1-3 2022/23 | Change in % |
|---|---------------|---------------|----------------|-----------------|-----------------|----------------|
| Revenue | 391 | 419 | -7% | 1,205 | 1,489 | -19% |
| EBITDA | 51 | 101 | -49% | 268 | 416 | -36% |
| EBITDA adjusted* | 71 | 117 | -39% | 321 | 452 | -29% |
| EBITDA margin (in %) | 13.1 | 24.1 | – | 22.2 | 28.0 | – |
| EBITDA margin adjusted (in %)* | 18.3 | 28.0 | – | 26.6 | 30.4 | – |
| EBIT | -18 | 32 | – | 63 | 214 | -70% |
| EBIT adjusted* | 2.7 | 49 | -95% | 119 | 251 | -53% |
| EBIT margin (in %) | -4.7 | 7.7 | – | 5.3 | 14.3 | – |
| EBIT margin adjusted (in %)* | 0.7 | 11.7 | – | 9.8 | 16.9 | – |
| Profit for the period | -42 | -3 | – | 7 | 221 | -97% |
| ROCE (in %)* | n.a. | n.a. | – | 3.1 | 14.5 | – |
| Net CAPEX | 182 | 314 | -42% | 699 | 803 | -13% |
| Cash flow from operating activities | 156 | 117 | +33% | 497 | 483 | +3% |
| Earnings per share (in €) | -1.19 | -0.20 | – | -0.16 | 5.33 | – |
| Number of employees** | 13,800 | 15,510 | -11% | 13,922 | 15,376 | -9% |

* Adjusted for start-up costs

** Incl. leased personnel, average. As at December 31, 2023: 13,792

The financial position as of December 31, 2023 was still characterised by investing activities and the associated financing activities. Total assets increased to € 4,197 million due to additions to assets, up 1% compared to the balance sheet date March 31, 2023. The equity ratio declined by 3.8 percentage points to 24.0% due to the loss for the period attributable to shareholders, the high investment volume and negative foreign exchange effects in other comprehensive income (OCI).

Cash and cash equivalents declined to € 608 million (March 31, 2023: € 792 million). In addition, AT&S has unused credit lines of € 623 million to secure the financing of the future investment programme and short-term repayments.

Opening Ceremony Kulim

On January 24, 2024 the opening ceremony of the Campus in Kulim took place. AT&S Malaysia will produce cutting-edge IC substrates, which are an integral part of high-performance data processors for computers, data centres and AI infrastructure. AT&S Malaysia will start delivering high-end IC substrates from plant 1 for high-performance AMD data centre processors in 2024, and increasing contributions to revenue can be expected from the beginning of 2025. Plant 2 is wind and water tight and as soon as an improvement in the market environment becomes foreseeable, the necessary steps will be initiated to ramp up this plant.

Expected market environment

The expectations for AT&S's segments are currently as follows: In the area of mobile devices, where overall market conditions are weak, reduced demand has been, and will remain, a challenge for AT&S. In contrast, the module printed circuit board business continues to develop positively.

Although the Automotive segment is subject to a growth trend as the electronic content per vehicle is increasing, the PCB market is under pressure, among other things due to higher inventory levels along the supply chain. In the Industrial segment, the market is expected to stagnate in 2024.

In the markets for IC substrates, demand for notebooks in 2024 is expected to be slightly higher than in 2023. This should lead to higher demand for IC substrates since inventories have now normalised. However, it must

generally be noted that the market for notebooks is highly volatile and subject to significant quarterly fluctuations.

The market for servers is currently still impacted by high inventory levels. The reduction of inventories is proceeding slowly, as an increasing share of investments currently is flowing into high-priced products focusing on artificial intelligence and the volume stagnated. Inventories should have normalised again in the second half of 2024, which is expected to boost demand for server products. Due to the anticipated change in architecture, further changes in the product mix are expected; likewise, the trend towards technologically higher-end IC substrates is also expected to continue.

Outlook 2023/24

AT&S expects the market environment to remain challenging with continued price pressure in the fourth quarter of the financial year 2023/24, and persisting high volatility and low visibility. High inflation and interest rates, recession risks as well as geopolitical developments continue to represent additional elements of uncertainty for the end markets. AT&S considers itself well prepared to overcome these challenges with the available technologies, its broad range of customers and applications as well as the successful progress of its efficiency programmes, and to enter the expected phase of market recovery.

Depending on the market development, AT&S will continue to push ahead the investment projects in Kulim and the expansion of the site in Leoben and implement technology upgrades at other locations. In view of the highly volatile environment, the ongoing investment projects will be reviewed at frequent intervals and adapted to the respective current situation if required.

The management is planning investments totalling up to € 1.1 billion for the financial year 2023/24 depending on the market environment and progress of projects.

On January 19, 2024, the company adjusted its revenue forecast for the current financial year 2023/24. AT&S now expects to generate annual revenue of around € 1.6 billion in the financial year 2023/24 (previously: between € 1.7 and 1.9 billion). The EBITDA margin adjusted for start-up costs will be in the expected range of 25% to 29%.

Outlook 2024/25

To counter the continued high price pressure, AT&S will continue to drive the previously initiated cost optimisation programmes in the financial year 2024/25. According to market estimates, demand for IC substrates for servers should recover in the second half of the year. In addition, IC substrate production will commence at the new plants in Kulim and Leoben at the end of 2024 and contribute to increasing revenue from the end of the financial year. With the start of production at the two plants, AT&S will continue to further differentiate its customer base for IC substrates.

As usual, the company will provide a concrete outlook for its financial indicators as part of the publication of the preliminary annual results on May 14, 2024.

Guidance 2026/27

The progress of the production capacity expansion in Kulim, as well as the expansion of the site in Leoben is still positive despite the challenging global economic situation. Therefore, AT&S assumes that revenue of approximately € 3.5 billion will be generated in the financial year 2026/27 and expects an EBITDA margin in the range from 27% to 32%. The management monitors the currently tense geopolitical situation very carefully in order to be able to respond to developments at any time and to make strategic adaptations.

AT & S Austria Technologie & Systemtechnik Aktiengesellschaft – Advanced Technologies & Solutions

AT& S is a leading global manufacturer of high-quality IC substrates and printed circuit boards as well as a developer of pioneering interconnect technologies for the core areas of mobile devices, automotive & aerospace, industrial, medical and high-performance processors for VR and AI applications. AT&S has a global presence with production sites in Austria (Leoben, Fehring) and plants in India (Nanjangud), China (Shanghai, Chongqing) and Korea (Ansan near Seoul). A new high-end production facility for IC substrates is currently being ramped up in Kulim, Malaysia.

A European competence centre with connected series production for IC substrate technologies is being built in Leoben. Both sites will start production in the financial year 2024/25. The company employs more than 14,000 people. Further information can also be found at www.ats.net



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NEWS FROM BELGIUM

ESA Exclusively Approves Ventec VT-901 material in ACB Belgium's HDI Rigid PCB qualification



Ventec International Group Co., Ltd. (6672 TT) is pleased to announce that its VT-901 polyimide material is now fully and exclusively qualified by ESA in ACB Belgium's manufacture of High-Density Interconnect (HDI) Printed Circuit Boards. With this recently obtained ESA qualification, ACB is currently the only PCB manufacturer able to offer HDI technology within an ESA qualified domain.

Ventec's VT-901 polyimide material offers exceptional reliability performance, meeting the demanding requirements of ACB's HDI PCB manufacturing process that adheres to ESA standards. It has a high Td of 395°C, a Tg of 250°C, and a Low-Axis CTE of 50.

Ventec manufactures all VT-901 polyimide using custom treaters equipped with advanced filtration systems and 100% Automated Optical Inspection (AOI) to ensure strict FOD-control and adherence to the IPC4101E Appendix A inspection standards for materials for space applications. The same specialized equipment is utilized to manufacture thin-core laminates that are specifically designed for the most challenging space and aerospace printed circuit board applications.

ACB's advanced PCB manufacturing plant in Dendermonde, Belgium, together with Ventec's AS9100 Rev D accreditation for their manufacturing and distribution facilities, establish both firms as leaders in the supply of space and aerospace electronics.

Joachim Verhegge, ACB Belgium's Plant Director, says: "Further to our already existing ESA approval for Ventec's VT-901 polyimide material in our Sequential Rigid and Rigid-Flex applications, we are pleased to now receive our ESA HDI technology qualification. This latest approval further reaffirms our position as a top-tier PCB manufacturer for the next generation of space programs."

Peter Coakley, Ventec Director of Sales EMEA, commented: "We have a long-standing technology partnership with ACB, and I'm happy to support them in further strengthening their position as a leading provider of aerospace-standard PCBs. Ventec VT-901 polyimide's thermal resilience and suitability for usage in high reliability rigid and flex rigid multi-layers in the demanding aerospace sector are demonstrated by the most recent ESA approval for HDI Rigid applications."

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.venteclaminates.com.

About ACB

ACB is one of Europe's leading manufacturers of High Technology & Quick Turnaround Printed Circuit Boards offering a wide range of technologies including rigid, flex-rigid and flexible multi-layer boards.

ACB is the partner of choice for companies requiring assistance with the design of high-end PCBs or for testing manufacturability of designs. As a technology leader with an excellent reputation in demanding market segments, ACB keeps true to its motto "...Eyes on the future, feet on the ground...". ACB has R&D and production facilities in Belgium and France. The group also has a component division.

Further information can be found by visiting www.acb.be.



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NEWS FROM ITALY

atg electronics announces exclusive representation of Detech's "Prey" UPI in Italy

atg electronics, a leading company in the Italian market offering innovative solutions for the assembly and production of PCB, announces its exclusive representation of Detech Europe Limited's "Prey Universal Product Inspector" (UPI) throughout Italy.

Founded as atg-italy srl on the request of the German brand atg Luther & Maelzer, atg electronics has rapidly grown, incorporating globally recognized brands that are leaders in their industries, and expanding its presence internationally with the establishment of atg electronics srl SB in 2021. The company offers innovative solutions for the assembly and production of PCBs. With a reputation for quality, atg electronics has rapidly grown to become a consulting leader.

"At atg electronics, we have always combined tradition with innovation, and our commitment to ethical, social, and environmental sustainability has guided our growth," said Daniele Pavani, CEO at atg electronics. "We are thrilled to represent Detech's "Prey" UPI in Italy, further solidifying our position as a consulting leader in the Italian market."

Leveraging years of vision and software expertise, UPI is a cost-effective, versatile visual inspection system designed for various industrial sectors, providing consistent and high-quality final product assessment. The system addresses the industry's longstanding reliance on human operators for final inspections by offering an automated solution.

“The UPI is not only user-friendly but also maintains accuracy, flexibility, and repeatability across diverse industries where human inspection is currently prevalent,” added Pavani.

Key features of the Universal Product Inspector (UPI) include its applicability in various industrial sectors, providing consistent and high-quality final product assessment. The system is universal and can be used for inspecting a wide range of items, examining both sides of an assembly in less than 4 seconds. Additionally, it is designed to identify missed/damaged connector pins, barcode and label placement, scratches, lead connections, and several other tasks that are currently manually inspected.

“atg electronics is committed to operating in a responsible, sustainable, and transparent way, and the adoption of Prey By Detech UPI aligns with our dedication to sustainable innovation,” concluded Pavani.

Prey By Detech is a British designed and manufactured product line. Based in Yorkshire, England, Detech Europe Limited has been involved in producing inspection technologies for many years, which has led to the development of the Universal Product Inspector (UPI). The company has its own software, design, and manufacturing, resulting in fast reactions to customer requirements. The Prey UPI will soon be available as an inline for customers needing this high-volume capability. The platform also allows itself for customization to fulfil customer requirements.

GlobalSMT



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NEWS FROM JAPAN

AGC Multi Material Presents the ELL Family of Extremely Low Loss Laminate and Prepreg Materials

AGC Multi Material is now offering the ELL family of laminate and prepreg material. ELL offers high speed, extreme low loss and high reliability for new and extreme applications. The ELL family is based on a new, proprietary polymer formulation and is available with NE (ELL 101), NER (ELL 102) or L2 (ELL 103) Fiberglass. ELL is UL registered with a UL flame rating of UL-94V0 and an RTI of 130C. It meets IPC 4103/240 laminate and /540 prepreg specifications.

ELL has been tested by key OEMs and industry organizations delivering best-in-class SI performance. Interconnect Stress Testing (IST) and OM Thermal Stress System performance testing has demonstrated excellent mechanical and thermal reliability of ELL even when used in sequential laminations and demanding microvia applications.

Market: Critical High Speed Servers and Switches

Features: Low Signal Attenuation and high data transfer rates

Market: Aerospace and Defence

Features: Low Signal Attenuation and high data transfer rates

Market: Complex Hybrid PCB Stack-up

Features: Extreme Low Loss and Ease of Processing

Customers can find technical information and downloads related to AGC's no flow material solutions on our website:

<https://www.agc-multimaterial.com/solutions/ell-101/> <<https://www.agc-multimaterial.com/solutions/ell-101/>>



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NEWS FROM THE UK

Ventec's VT-901 polyimide material is now fully qualified by ESA in Amphenol Invotec's manufacturing process for rigid and Flex-rigid PCBs

We have teamed up with Amphenol Invotec, one of Europe's leading manufacturers of complex printed circuit boards (PCBs), and are delighted to announce that Ventec's VT-901 polyimide material is now fully qualified by ESA in Amphenol Invotec's manufacturing process for rigid and Flex-rigid PCBs.

With high Td (395), a Tg of 250oC and Low-Axis CTE (50), Ventec's VT-901 polyimide material provides the extremely high reliability performance demanded by Amphenol Invotec's space-level flex & flex-rigid PCB manufacturing process that meets ESA requirements.

Amphenol Invotec's ESA approved Tamworth facility and the AS9100 accreditation of Ventec's manufacturing and distribution facilities clearly position both companies as world leaders in the supply of high-reliability aerospace PCB solutions.

We manufacture all VT-901 polyimide using specially designed treaters with multiple stage filtration systems and 100% Automated Optical Inspection (AOI) for prepreg FOD-control. The same specialist equipment is used for the production of thin-core laminates for use in the most demanding space and aerospace PCB applications.

Ventec and Invotec have formed a long-term working partnership and through mutual understanding and close cooperation are setting the standards for cleanliness of materials and finished PCBs, putting both

companies in a market-leading position within the space and aerospace electronics supply chain.

Tim Tatton, Amphenol Invotec's General Manager, says: 'Amphenol Invotec and Ventec are perfectly aligned and committed to incorporate a wide range of solutions into the most demanding of applications and environments.'

Mark Goodwin, Ventec COO Europe and USA, commented: 'The ESA approval further demonstrates the thermal robustness of Ventec VT-901 polyimide and its suitability for use in high reliability rigid and flex rigid multi-layers in the demanding aerospace sector.'



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PCB INDUSTRY NEWS

Global PCB industry in 2023 declined by 15.6% to US\$73.9 billion; Industry to Grow by 6.3% in 2024, Spotlight on Four Key Issues - Industrial Technology Research Institute

The imbalance in supply and demand during COVID-19 in 2021 and 2022 created a global bubble of consumption. When the pandemic ended, pressure from destocking and rate increases to curb inflation led to a massive downturn in the global PCB industry in 2023.

The Science and Technology International Strategy Center (ITSI) of the Industrial Technology Research Institute (ITRI) estimated that the total output of the global PCB industry in 2023 declined by 15.6% to US\$73.9 billion. In China, Japan, Taiwan, and Korea, among Chinese-owned plants, their relatively low proportion of substrates, as well as strong growth in automotive applications, meant they outperformed the global average with a decline of just 9% for the year; Korea on the other hand had the highest proportion of substrates with most concentrated in consumer electronic memory applications so experienced a decline of more than 20%; while substrates accounted for a significant proportion of the industry output in Japan and Taiwan, their relatively balanced product mix as well as the support of automotive applications meant the level of decline fell somewhere between China and Korea.

The lower base period of 2023 meant that the electronics industry as a whole should experience stronger growth in 2024. The restocking of inventories should also see the PCB industry enter another cycle of growth. Consumer demand will need more time for a positive feedback cycle to re-establish itself but may still benefit from upgrades to some product specifications. The output of the global PCB industry is expected to climb

back up to US\$78.2 billion in 2024, an increase of 6.3% from 2023. Once consumer market growth approaches that of the global economy, the global PCB industry output should begin sustaining 4-5% long-term growth.

The following four key issues were identified by the Taiwan Printed Circuit Board Association (TPCA) and ISTI regarding the development of the global PCB industry in 2024:

First; international competition in building a resilient semiconductor industry is affecting PCB and substrate ecosystems. Governments have rolled out policies aimed at strengthening their semiconductor supply chains in the wake of COVID-19 supply chain disruptions and semiconductors becoming a strategic commodity.

In addition to the increase in incentives, the US-China technology embargo is continuing to intensify, forcing foreign-owned companies such as TSMC, Samsung, and SK hynix to limit their expansion in China. China is therefore even more reliant on its domestic semiconductor industry now, but there are still questions over its economic slowdown and the sustainability of its massive subsidies. What should be closely monitored in the future is the effect of China's push to accelerate its level of domestication on advanced packaging, a field that is not yet under sanctions.

The US introduced its "Supporting American Printed Circuit Boards Act" in 2022. The Act called for the government to provide USD 3 billion in funding to increase the production of PCBs. The bill was ultimately not voted on but served as an indication that PCB was now attracting the attention of policymakers. Later on, President Biden and Prime Minister Trudeau announced on March 24, 2023, that the two countries would spend USD 52 million to support PCB production in North America. Domestic PCB production will also be expanded under the "Defence Production Act" to prevent gaps in critical technologies that threaten national security.

Second; the emergence of carbon-neutral electronic products ups pressure on the supply chain to curb carbon emissions.

For the electronics industry, there is no doubt at all that it must adapt to the macro environment and reduce its carbon emissions. The only variable is the level of pressure from customers and government regulations.

Third; a new PCB cluster takes shape in Southeast Asia as supply chains accelerate the pace of globalisation. Customer demand for risk diversification and the development of new markets meant PCB vendors began looking southward in their investments at the end of 2022. The most

popular destinations have turned out to be Thailand, Vietnam, and Malaysia. All the new investments announced to date indicate that the next emerging PCB cluster will be in Thailand. China may remain the main base of global PCB production, but the latest wave of investments in Southeast Asia will divert resources away from foreign investments in China. More than 10 leading Chinese companies have also invested in Thailand, so China's share of global PCB production output will start to decrease over time.

Fourth; generational product upgrades will become the main source of growth. The lack of killer applications makes large increases in sales of end-user products unlikely. Though a small increase in shipments of key end-user products is expected in 2024, this will be mainly due to inventory replenishment rather than a recovery in demand. Growth will therefore be driven by generational changes in technologies and products. Examples include expansion in substrate demand from developments in advanced packaging, continued increases in automotive PCB prices from autonomous driving, as well as boost to rigid PCB products from AI applications. These are all products that will have a more significant effect on the output of the global PCB industry.

Jan 30, 2024

What's New In Electronics



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PCB SUPPLY CHAIN NEWS

Red Sea shipping disruptions ripple through Asia-Europe supply chains

Companies need to review risks in line with new reality, experts say

January 28, 2024

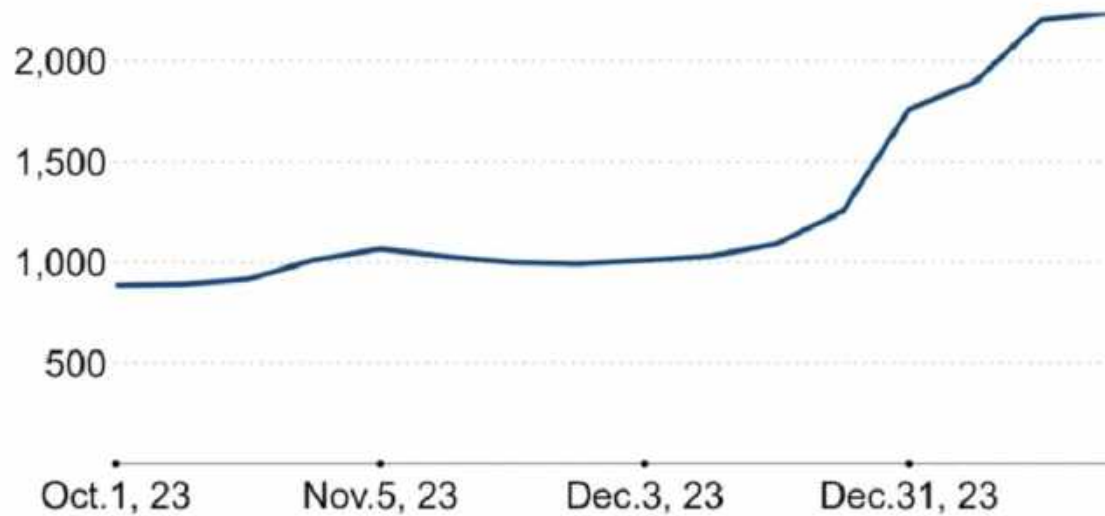
AKIRA KITADO, Nikkei

Political turbulence in the Red Sea is forcing global shippers to make more costly journeys and increasing pressure on companies to review their supply chains and prepare for a new norm characterized by longer transportation distances.

“The market will need to adjust to longer transit times. For everybody dependent on containerized trade, it means the supply chains have to adjust,” said Peter Tirschwell, vice president for maritime & trade at S&P Global Market Intelligence. “It means planning has to be accelerated, the manufacturing has to be accelerated. It means a greater commitment of working capital to inventory.”

He expects the process of companies adjusting to the “new reality” to take a few more months, assuming the current hostilities continue in the Middle East.

Shanghai Containerized Freight Index



Source: Shanghai Shipping Exchange

The route through the Red Sea and the Suez Canal is vital for transporting goods between Asia and Europe. However, risk has increased since November when Yemen-based, Iranian-backed Houthi militants started attacking container ships in the Red Sea, followed by retaliatory attacks by the U.S. and U.K. earlier this month.

About 90% of the container ships sailing through the Red Sea have been forced to divert from the crucial trade route since mid-December, according to shipping services and data provider Clarksons. Denmark's AP Moller-Maersk and Germany's Hapag-Lloyd are among the global shipping companies that have decided to avoid the route.

"Our ships that used to pass through the Red Sea are either staying in safer waters or switching to routes such as going around the Cape of Good Hope," said a spokesperson at Nippon Yusen, also known as NYK Line, the largest Japanese shipping company and the operator of a ship seized by the Houthis in the Red Sea after the outbreak of the Israel-Hamas War.

According to Emily Stromquist, managing director of U.S. consultancy Teneo, diverting via the Cape of Good Hope can add up to two weeks of shipping time between Asia and Europe.

"Beyond the added costs and time of shipping around the Cape of Good Hope, the more container and tanker traffic is redirected along this route,

the greater the logistical concerns too,” Stromquist said. “There is insufficient port capacity to handle this volume of shipping activity, and the risk of bunker fuel shortages could create additional bottlenecks along the route.”

Rates for ocean freight from Asia to Europe are rising sharply. The Shanghai Containerized Freight Index was 2,239 points on Jan. 21, double the level in mid-December.

The shipping disruptions are hitting global manufacturing. Tesla and Volvo Car earlier said they were suspending some production in Europe due to a shortage of components after many ships were rerouted around the southern tip of Africa.

According to one analyst, around 70% of components in the European automotive sector imported from Asia come through the Red Sea. Japan’s Suzuki Motor also suspended production at a Hungarian car plant for seven days through Jan. 21 due to delays in the delivery of engines and other parts from Japan.

In Spain, the Association of Manufacturing and Distribution Companies announced that several sectors had launched advance orders for certain raw materials and goods, such as furniture and textiles, for which they are experiencing supply difficulties.

The extended sailing times of many ships have resulted in temporary shortages of ships and containers. “As a result, there are delays not only for ships from Asia to Europe but also for ships from China to Southeast Asia and elsewhere,” Takuma Matsuda, professor of maritime economics at Takushoku University in Tokyo, told Nikkei Asia.

Air freight rates are also rising due to the increasing demand to switch from ocean freight to air freight, which is more expensive but faster. Freight market analytics services Xeneta reported on Jan. 19 that air cargo volumes from Vietnam to Europe—a major trade route for apparel—spiked 62% in the week ended Jan. 14.

A spokesperson for Japan’s All Nippon Airways told Nikkei Asia, “We have begun to receive orders for cargoes from Japan to Europe and the east coast of North America, switching from ocean to air freight.”

The disruptions to maritime transportation are reminiscent of the global logistic disruptions that occurred during the COVID-19 pandemic. However, experts pointed out the fundamental difference.

S&P's Tirschwell said the disruptions that happened several years earlier were "demand-driven" disruptions when the stay-home demand for various goods from households was exceptionally high. This time, he said, the chaotic situation will not last long as demand is lower and the supply of ships has increased since the pandemic.

Some shippers are continuing risky journeys through the Red Sea. French shipping group CMA CGM decided to continue sailing through the troubled waters under the protection of the French navy.

A spokesperson for Singapore-based Pacific International Lines, the largest carrier in Southeast Asia, told Nikkei Asia on Tuesday, "As of now, we are continuing our Red Sea services with enhanced security measures in place and keeping in constant contact with our vessels."

In the bigger picture, however, the shipping disruptions serve as a fresh reminder that global supply chains are subject to unexpected risks.

With no signs of the situation calming down, the European Union this week agreed in principle to deploy ships to the Red Sea to protect commercial ships from Houthi attacks. Asian countries such as Singapore have also announced participation in the operation to secure the sea route.

"Long-distance supply chains are now more risky than they were," said Tirschwell, citing various factors such as geopolitics, public health, and climate. Companies may need to engage in longer-term strategic decision-making beyond short-term shipping and supply adjustments, he added.

Additional reporting by Tsubasa Suruga in Singapore, Rhyannon Bartlett-Imadegawa in London, and Mailys Pene-Lassus in Paris.

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NEWS FROM THE TPCA

Intel's AI PC plan promotes legal persons and is optimistic about the PCB chain, and the five major manufacturers in the PCB chain will benefit the most

Intel launched the AI PC Acceleration Program (AI PC Acceleration Program) last year. It is understood that the relevant plans continue to advance according to schedule. At the same time, Intel estimates that it will ship 40 million AI-enabled PC products this year. Legal persons are optimistic, although AI PC is not a new topic, but the launch of new application products will still help improve the market conditions and buying sentiment of PC and NB. It is expected that the five major manufacturers in the PCB chain will benefit the most, including Xinxing, Huatong, Jinxiangdian, Jianding and NB board manufacturers. Hannstar Blog.

According to Intel's AI PC Acceleration Program plan, it is expected to be quite helpful in accelerating the development of AI. If it can significantly increase the penetration rate of AI in PCs, the Taiwan Circuit Board Association (TPCA) has previously analyzed that there will be two consequences for the industry.

(1) According to analysis by the Taiwan Circuit Board Association, although AI has many applications in smartphones, apart from that, AI is still mostly built on infrastructure-related products such as cloud computing and servers, and other consumer products have not really been used in large quantities. After the introduction of AI, the output value of most applications is not large, and the help to the supply chain is quite limited.

Since PC is the largest consumer product after smartphones, this will effectively expand the visibility of AI in consumer products and will also be an important milestone in the development of consumer products.

(2) The Taiwan Circuit Board Association analyzed that although AI has the most direct impact on the computing performance of the chip in terms of hardware, the system level must also be followed up and upgraded to effectively unleash the potential of high-end computing chips, which will directly affect peripheral components.

Xinxing is the leader in carrier boards and has cooperated closely with Intel in the past. The legal person expects that the introduction of new products will be conducive to operational recovery. Jinxiangdian, Jianding and Hanyubo have different advantages in the NB field, among which Hanyubo NB terminals Application revenue accounts for 40%, and the company continues to promote the development of its product structure towards mid-to-high-end products.



The European Institute for the PCB Community

International Diary

2024

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

March

EIPC @ ECWC16 WECC

April 8-11

Anaheim, USA

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

May

EIPC Summer Conference

Visit ESA/ESTEC

Tuesday 4 & Wednesday 5 June

Noordwijk, The Netherlands

SMT Nuremberg

11-13 June

Nuremberg, Germany

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

September

EIPC @ FED Conference

20 & 21 September

Ulm, Germany

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

October

EIPC @ Electronica

12-15 November

Munich, Germany