



The European Institute for the PCB Community

# EIPC SPEeDNEWS

*The Weekly On-Line Newsletter*

*Issue 15 – May 2023*

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## NEWS FROM THE EIPC

### **PRODUCTRONICA 2023**

**November 14-17**

In 2022, the EIPC took again part at Electronica in München. The show was buzzing and we considered our participation successful.

Productronica 2023 takes place at Messe München from November 14<sup>th</sup> to the 17<sup>th</sup> and the EIPC will represent itself again. If you would like to join us as a co-exhibitor at the EIPC stand, then we would very much like to hear from you. Those stand-alone stands can be rather lonely, and rather expensive; the big advantage of getting together with others on a shared stand is attractive in terms of cost, and also in companionship. The EIPC is looking for **EIPC Members exclusively** to become co-exhibitors.

EIPC will provide the necessary administrative support, stand management, liaison with the exhibition organisers, stand contractors, etc., and will publicise the joint venture on a continuing basis throughout the year.

**The following options will be offered for Productronica 2023:**

#### **1. New! Poster & Flyers**

Your company:

- will be represented on the EIPC stand via an A1 size poster
- will be able to display company flyers on the stand

The fee for this service is € 1000.-

#### **2.Co-exhibitor integrated in the EIPC stand.**

The co-exhibitor :

- will be allowed to display 1 (A0) poster with company logo and information in the stand
- will be allowed to share the 2 brochure displays with the other co-exhibitors
- will be allowed to use the stand equipment like refrigerator, coffee machine and other products provided in the stand by the EIPC
- will receive 1 free exhibitor pass as a co-exhibitor for the entire period of the exhibition
- will be registered in the exhibitor catalogue with their own company information for a fee charged by Messe Munich of € 695.-

- will be allowed to use electricity provided by EIPC
- will be allowed to use WIFI internet provided by EIPC

The fee to become a co-exhibitor is € 2250.-. Each co-exhibitor has to be registered at Messe München.

For this registration, Messe Munich charges an additional fee of € 250.-. Total fixed costs: € 2250.- + € 250.- + € 695.- = € 3195.-

### **3.Co-exhibitor stand of 12 sqm with open connection to the EIPC stand.**

The stand will have the Co-exhibitors' own company identity.

The co-exhibitor:

- will be allowed to decorate this "Co-exhibitor area" as they wish with their own promotion material
- will be able to use the dedicated area 12 sqm of the EIPC stand as "Company stand". Included is a seating area (1 table, 4 chairs) and 1 brochure display
- will be allowed to use the stand equipment like refrigerator, coffee machine and other products provided in the stand by the EIPC
- will receive 1 free exhibitor pass as a co-exhibitor for the entire period of the exhibition
- will be registered in the exhibitor catalogue with their own company information for a fee charged by Messe Munich of € 695.-.
- will be allowed to use electricity provided by EIPC
- will be allowed to use WIFI internet provided by EIPC
- stand cleaning

The fee for a customized co-exhibitor stand of 12 sq. m will be € 5550.-. This fee includes the additional co-exhibitor registration fee charged by Messe Munich of € 250.- as well as the obligatory exhibitor catalogue fee of € 695.-. If you require a larger stand size, please contact the EIPC for further information and prices.

If this is of interest, please do contact us ([eipc@eipc.org](mailto:eipc@eipc.org)) to discuss the matter further.



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## NEWS FROM GERMANY

### ***Germany has a plan to tackle a rapidly ageing workforce: recruiting robots***

Digitalization could be key in solving Germany's labour shortage crisis, as the country feels the effects of having Europe's most aging population.

There won't be major job losses as a result of digitalization, according to Ulrich Walwei, vice director of Germany's Institute for Employment Research.

"There is this automation effect that means, of course, labor can be saved ... But, on the other hand, it gives consumers and also firms opportunities to use their resources in a different way," he said.

May 1, 2023

by Hannah Ward-Glenton

CNBC

A robot takeover has long been the stuff of science fiction, but digitalization could be key in solving Germany's labor shortage crisis, as its population ages.

A record 45.9 million people were employed by Europe's largest economy in the fourth quarter of 2022, the German Federal Statistical Office found. But, while more people than ever have jobs, over half of German companies reported that they were struggling to find skilled workers to fill vacancies, according to German Chambers of Commerce reports from January.

Chancellor Olaf Scholz highlighted digitalization as a priority when he replaced Angela Merkel in November 2021, with a three-party coalition contract titled "Daring More Progress" pledging to implement digital technologies across the business world.

Aging populations tend to be faster at digitalizing their workforces — with Germany having the largest aging population in Europe, it's unsurprising that it sits with Japan and South Korea as one of the countries utilizing technology in the workplace.

But what does enhancing the workforce through robots and digitalization actually look like?

## Enhancing productivity

Digitalization manifests differently in every organization, whether through plate-carrying robots, self-checkout machines at grocery stores or using online platforms to chat to colleagues. In most cases, technology is added to make workflow more efficient and cost effective.

“We have to enhance productivity by technology,” Steffen Kampeter, chief executive of the Confederation of German Employers’ Associations told CNBC.

“There is a correlation between the use of modern technologies and the growth of economic growth and the labor market participation in most societies,” Steffen said.

Some 37% of Germans thought technological changes would increase their work productivity in 2018, according to Gallup research. Just 1% said that it would decrease productivity, while 62% opined technology wouldn’t have an impact.

Research by the analytics firm also suggested Germans aren’t afraid that robots will steal their jobs.

Only 10% of those surveyed believed implementing more tech would increase the risk of them losing their job, while 6% said it would decrease the chance of that happening. The remaining participants said that deploying more technology wouldn’t make a difference.

There won’t be major job losses as a result of digitalization, according to Ulrich Walwei, vice director of Germany’s Institute for Employment Research.

“There is this automation effect that means, of course, labor can be saved ... But, on the other hand, it gives consumers and also firms opportunities to use their resources in a different way,” he said.

“What we see is a strong complementarity of digital technologies and economic activities,” Walwei added.

Europe’s largest economy also has the biggest stock of robots in the European Union — almost half of the total EU supply — according to a 2020 report by the European Commission. Most are installed in the automotive sector, but the food and beverage, industrial machinery and electronics industries have also taken on a high number of mechanical employees.

There were more than 20 robots per 1,000 manufacturing workers in Germany in 2015, the International Federation of Robotics and the European Jobs Monitor estimates, and that number is likely to have grown in the last eight years.

## A hybrid future

Full digitalization is not desirable in many lines of work, even if it were possible.

“No one will give their grandma to a robot,” Norma Steller, chief product officer at German Bionic told CNBC.

German Bionic produces exoskeletons that counter-balance weight for employees in labor-intensive jobs and keep users in postures that will prevent them from injuring themselves.

Steller said the care sector would benefit from the addition of robots in workplaces, given its serious staff shortages and physically demanding roles.

“We kind of bridge the gap and put a robot on the human. The idea is we keep the human there with all the skills and emotions and empathy that is required for workplaces,” she added.

Digitalization also allows repetitive work to be automated, giving employees the chance to take on more mentally challenging tasks, says Cagri Pehlivan, CEO of robot services provider Robot4Work.

“Our robots can free up human workers to focus on more complex and creative work, leading to more fulfilling and engaging jobs,” Pehlivan told CNBC via email.

Outsourcing more physically intensive tasks to robots also facilitates older employees to stay in the workplace longer, Pehlivan said.

“By automating those tasks with robots, older workers can continue to contribute their valuable skills and experience to the workplace in a way that is safe and comfortable for them,” he said.

“Ultimately, the goal of integrating robots into the workplace is to augment human capabilities, not replace them,” he added.

Increasing numbers of older people are still working in Germany, with the employment rate of 55- to 64-year-olds up from 62% in 2012 to 71% in 2021, according to the German Federal Statistical Office.

This figure is only set to increase, as Germany looks to raise its state pension age from 65 to 67 in the coming years.

#### Challenges for digitalization

Germany is suffering from a digital skills gap, while some firms are “way behind,” when it comes to using digital technologies, Ulrich Walwei told CNBC.

“[Digital competency] is something which needs, of course, to be trained very early. That means also in schools and then also in apprenticeships and at university,” he added.

According to Eurostat data, 48.92% of the German population has “basic or above basic overall digital skills,” which is below the European Union average of 53.92%.

Almost 19% of individuals reported they had “above basic overall digital skills,” which is below the EU average of 26.46%, while 3.58% of Germans consider themselves to have “no overall digital skills,” which is slightly above the EU average of 3.04%.

People also have reservations about relying on robots. For example, 70% of 1,000 Germans polled by Gallup said that they would not feel safe being driven in a car without a human driver. Companies hoping to implement new technology also have a large number of regulatory hoops to jump through to guarantee user safety. Only after those tests are passed can digitalization start to become a seamless part of the working day.



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## NEWS FROM THE UK

### Semiconductor Industry Update Webinar Registration Now Open

When will the current market downturn come to an end? Will the overall market decline be single or double digit? Will the automotive and industrial markets save the day? What is the outlook for 2024? Find out the answer to these and other key questions at Future Horizons' Semiconductor Industry Update Webinar, **May 9, 2023** - 3pm UK BST (GMT+1). Site licence for corporate library or multi-user use available. <https://www.futurehorizons.com/page/136/Industry-Update-Webinar>

#### Registration

[https://us02web.zoom.us/webinar/register/8516814791234/WN\\_R2-3Z5QLSxmYYDYDs9H4iw](https://us02web.zoom.us/webinar/register/8516814791234/WN_R2-3Z5QLSxmYYDYDs9H4iw)

#### Why?

Founded in 1989, Future Horizons' forecast track record and industry experience makes this a must-attend event for key decision makers in the semiconductor, electronics and all related industries. We are also never afraid take a contrarian view where necessary, backed up by firm data and sound analytical process.

#### What You Will Learn

This one-hour broadcast will focus primarily on the 2023 semiconductor industry forecast and outlook for 2024, including:

- How will the downturn play out in the short and medium-term
- What are the key indicators to look out for moving forward
- How to build resilient strategies and business models

As always, the presentation slides will be mailed out an hour before the webinar with ample opportunity to ask questions in advance, during and after the event.

### Who Should Attend?

- All companies, small and large, from startups to established market leaders
- Key decision-makers engaged in the design, fabrication or supply of semiconductors
- Government organisations involved in trade and investment
- Those involved in investing or banking within the electronics industry
- Senior marketing executives planning future marketing strategy

### Can't Attend Live?

Sign up to receive the slides and a recording of the live event for subsequent viewing

### Why Future Horizons?

We have been in the business of forecasting and analysing the semiconductor market for over 55 years and have been a trusted advisor to governments, investors and most of the top global semiconductor firms. Time and time again we have delivered sound advice and saved our clients time and money with our forensic and accurate analysis of the industry.

For a small investment of £150 plus £30 UK VAT you will gain accurate industry insight to make good strategic decisions in these uncertain times

- Site license option for unlimited company participation
- Please pass to a colleague if already attended or not suitable for you
- This event can also be held in-house for your added convenience and flexibility

Malcolm Penn  
Chairman & CEO

### IMAPS-UK FREE WEBINAR

Monday 12 June 2023 at 13:00 (UK time)

Reducing the Environmental Impact of Photonics and Electronics

Dr. Jeff Kettle, University of Glasgow

Photonics and electronics manufacturing requires a transition to more sustainable practices. This webinar highlights the latest life cycle assessments and the challenges in the fabrication processes that must be addressed to reduce environmental impact. A method to improve the recovery of critical materials at the end of life will be introduced.

For any other details or information please contact:

IMAPS-UK Secretariat

125 High Street Chesterton, Cambridge, UK

Tel: +44 0131 2029004

e-mail: [Office@imaps.org.uk](mailto:Office@imaps.org.uk)

## Silicon Chip Industry Awareness Workshop Seminar

Unlock Your Potential Today!

Whether you're a non-technologist struggling with the jargon or a specialist looking to understand the overall industry structure, this workshop is for you. Join us on Tue 6 June 2023, 9:30am to 4:00pm at the Holiday Inn in Kensington, London. Gain a competitive edge in the Semiconductor Industry by learning how the IC industry works from the science that enables silicon chips to be made from sand to the market fundamentals that drive applications and economics. Experience the industry through Listen, Discuss, See, Touch, and Learn activities and enjoy improved job satisfaction and operational efficiency.

Priced at just UK£695 plus 20 percent UK VAT per delegate, the fee includes copies of presentation materials, coffee breaks and lunch. Workshops can also be held in-house for your added convenience and flexibility. To preserve course integrity space is limited, so don't wait – Secure Your Spot Today at:

<https://www.futurehorizons.com/page/12/silicon-chip-training>

### Past Attendee Comments

- \* As a non-technologist, it was very beneficial to have these issues so clearly explained
- \* The seminar provided a good basis to understanding the industry
- \* It was GREAT! I can't remember a day of a similar density
- \* I finally understand how to recognize products & their use in technology
- \* This has helped me structure my thoughts & plans for the company
- \* It gave me deeper insight into the industry in a way difficult to obtain anywhere else
- \* This will be very useful when involved in our core business development discussions





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### PCB INDUSTRY NEWS

**‘Godfather of A.I.’ leaves Google after a decade to warn society of technology he’s touted**



*Artificial intelligence pioneer Geoffrey Hinton speaks at the Thomson Reuters Financial and Risk Summit in Toronto, December 4, 2017.*

*Mark Blinch | Reuters*

Geoffrey Hinton, known as “The Godfather of AI,” received his Ph.D. in artificial intelligence 45 years ago and has remained one of the most respected voices in the field.

For the past decade Hinton [worked part-time](#) at [Google](#) between the company’s Silicon Valley headquarters and Toronto. But he has quit the internet giant, and he [told The New York Times](#) that he’ll be warning the world about the potential threat

of AI, which he said is coming sooner than he previously thought.

“I thought it was 30 to 50 years or even longer away,” Hinton told the Times, in a story published Monday. “Obviously, I no longer think that.”

Hinton, who was named a 2018 Turing Award winner for conceptual and engineering breakthroughs, said he now has some regrets over his life’s work, the Times reported. He cited the near-term risks of AI taking jobs, and the proliferation of fake photos, videos and text that appear real to the average person.

In a statement to CNBC, Hinton said, “I now think the digital intelligences we are creating are very different from biological intelligences.”

Hinton referenced the power of GPT-4, the most-advanced large language model, or LLM, from startup OpenAI, whose technology has gone viral since the chatbot ChatGPT was launched late last year. Here’s how he described what’s happening now:

“If I have 1,000 digital agents who are all exact clones with identical weights, whenever one agent learns how to do something, all of them immediately know it because they share weights,” Hinton told CNBC. “Biological agents cannot do this. So collections of identical digital agents can acquire hugely more knowledge than any individual biological agent. That is why GPT-4 knows hugely more than any one person.

Hinton was sounding the alarm even before leaving Google. In an interview with [CBS News](#) that aired in March, Hinton was asked what he thinks the “chances are of AI just wiping out humanity.” He responded, “It’s not inconceivable. That’s all I’ll say.”

Google CEO [Sundar Pichai](#) has also publicly [warned of the risks](#) of AI. He told “60 Minutes” last month that society isn’t prepared for what’s coming. At the same time, Google is showing off its own products, such as self-learning robots and Bard, its ChatGPT competitor.

But when asked if “the pace of change can outstrip our ability to adapt,” Pichai downplayed the risk. “I don’t think so. We’re sort of an infinitely adaptable species,” he said.

Over the past year, Hinton has reduced his time at Google, according to an internal document viewed by CNBC. In March 2022, he moved to 20% of full-time. Later in the year he was assigned to a new team within Brain Research. His most recent role was vice president and engineering fellow, reporting to Jeff Dean within Google Brain.

In an emailed statement to CNBC, Dean said he appreciated Hinton for “his decade of contributions at Google.”

“I’ll miss him, and I wish him well!” Dean wrote. “As one of the first companies to publish [AI Principles](#), we remain committed to a responsible approach to AI. We’re continually learning to understand emerging risks while also innovating boldly.”

Hinton’s departure is a high-profile loss for Google Brain, the team behind much of the company’s work in AI. Several years ago, Google reportedly [spent \\$44 million](#) to acquire a company started by Hinton and two of his students in 2012.

His research group made major breakthroughs in deep learning that accelerated speech recognition and object classification. Their technology would help form new ways of using AI, including ChatGPT and Bard.

Google has [rallied teams](#) across the company to integrate Bard’s technology and LLMs into more products and services. Last month, the company said it would [be merging](#) Brain with DeepMind to “significantly accelerate our progress in AI.”

According to the Times, Hinton said he quit his job at Google so he could freely speak out about the risks of AI. He told the paper, “I console myself with the normal excuse: If I hadn’t done it, somebody else would have.”

Hinton [tweeted](#) on Monday, “I left so that I could talk about the dangers of AI without considering how this impacts Google. Google has acted very responsibly.”

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## NEWS FROM THE IPC

### **Cost Pressures Receding as Industry Expects Some Sector Growth in 2023**

*IPC Releases April Global Sentiment of the Electronics Supply Chain Report*

**BANNOCKBURN, Ill., USA, May 2, 2023** – Per IPC’s [April 2023 Global Sentiment of the Electronics Supply Chain Report](#), last month delivered a mixed bag of industry sentiment: cost pressures are receding; industry demand appears to be slowing; and industry expects growth in some sectors.

Survey results show:

- 54 percent of respondents reported that labor and material costs are rising, but the number of companies experiencing rising costs continues to decline.
- The Orders Index slipped to 105. While this is still in expansionary territory, it is the lowest it has been since the start of the survey.
- Industry believes the military sector will grow 16 percent on average this year, followed by the aerospace sector and the communications sector which are both expected to grow by roughly 11 percent. The medical sector is expected to rise 10 percent.
- The automotive sector and industrial electronics sector are both expected to rise 5.6 percent. The consumer electronics sector is expected to decline 3 percent and the computer sector is expected to decline 7 percent in 2023.

“Over the next six months, electronics manufacturers expect to see continued increase in both labor and material costs,” said Shawn DuBravac, IPC chief economist. “Meanwhile, backlogs, ease of recruitment, and profit margins are expected to contract.”

For the report, IPC surveyed hundreds of companies from around the world, including a wide range of company sizes representing the full electronics manufacturing value chain. [View full report.](#)

## **Global Banking Crisis Continues; Inflation Rates Remain Stubbornly High in Both Europe and the United States**

*IPC Issues April Economic Outlook Report*

**BANNOCKBURN, Ill., USA, May 4, 2023** — Economic data over the last month indicates that while inflation remains stubbornly high, economic growth is slowing. The base case scenario for the United States. right now suggests a recession in the middle two quarters of the year. The U.S. economy should grow about 1.2 percent this year, but growth in the back half of the year will be weak.

Germany recently raised its economic growth forecast for the year to 0.4 percent, up from the previous 0.2 percent, but the environment in both the United States and Europe remains persistently difficult. It remains uncertain how sharply higher interest rates will fully impact the economy.

“Supply constraints are easing everywhere which on the surface looks like a good thing. But it likely also means that backlogs will wane in the second half of the year. In the absence of new demand, output will likely be weak,” said Shawn DuBravac, IPC chief economist.

Additional data in the [April 2023 IPC Economic Outlook](#) show:

- The U.S. economy grew 1.1 percent in the first quarter, coming in below an expected rise of 1.9 percent. However, the headline number masks underlying strength in the economy.
- U.S. manufacturing sentiment contracted for the fifth consecutive month in April. The manufacturing PMI rose 0.8 percentage points in the last month, but not enough to move back into expansionary territory.
- The European economy grew during the first quarter of the year, edging up 0.1 percent in the euro area and up 0.3 percent in the EU. The economy is up 1.3 percent in both areas compared to the first quarter of last year.
- In the EU, manufacturing output in electronics end markets rose in February, increasing 1.3% from the prior month and 2.9% from the year-ago period.

View [April 2023 IPC Economic Outlook](#). For more information on IPC's industry intelligence program including current research and reports, visit [www.ipc.org/advocacy/industry-intelligence](http://www.ipc.org/advocacy/industry-intelligence)



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## International Diary

### 2023

#### **EIPC @ SMT-connect**

**Hall 5-Stand 114**

9-11 May

Nuremberg, Germany

#### **EIPC Summer Conference**

Visit BMW World

15 & 16 June

Munich, Germany

#### **22<sup>nd</sup> EIPC Technical Snapshot Webinar**

Registrations via [www.eipc.org](http://www.eipc.org)

September

#### **23<sup>rd</sup> EIPC Technical Snapshot Webinar**

Registrations via [www.eipc.org](http://www.eipc.org)

October

#### **EIPC @ Productronica 2023**

14-17 November

München, Germany

#### **24<sup>th</sup> EIPC Technical Snapshot Webinar**

Registrations via [www.eipc.org](http://www.eipc.org)

December