



CASE STUDY

Auvideo partners with Panasonic to scale its fast-growing AI carrier board business

When Auvideo decided to take its production in-house, Panasonic Connect Europe was on hand to instantly meet its SMT needs and provide critical ongoing support to help the business continue to grow.

Client: Auvideo

Location: Landsberg am Lech, Germany

Product(s) supplied:

AM100

NPM-W2 / NPM-W2S

PanaCIM-EE: line management system

PanaCIM-EE Gen2: line management system

Challenge

Taking production of its customised AI carrier boards in-house, Auvideo needed a partner it could trust to provide the critical SMT production line and support essential to its business growth.

Solution

Panasonic Connect Europe was instantly able to provide the machinery and expertise required to help Auvideo meet its immediate customer demands and has become a critical long-term partner to scale production.

"We have built our reputation on our ability to rapidly design, prototype, test and manufacturer customised solutions for our customers, who are leading the AI revolution. Panasonic has been integral in helping us to deliver on that promise successfully time and time again."

Oliver Stelbrink
CTO
Auvideo GmbH



SMART FACTORY SOLUTIONS

AUVIDEO PARTNERS WITH PANASONIC
TO SCALE ITS FAST-GROWING AI
CARRIER BOARD BUSINESS

Panasonic
CONNECT

In the exciting AI sector, German company Auvideo has quickly made a name for itself as a leading designer and manufacturer of customised carrier boards based on the NVIDIA Jetson platform. As Europe's only NVIDIA Elite Partner, Auvideo's products are used in the rapidly growing area of machine learning applications. It is helping to deliver critical technology components for a variety of innovative AI solutions ranging from improving traffic management to transforming efficient crop production.

"We started by outsourcing some of our manufacturing, but this quickly became frustrating. Our products are very specialised and often small batch. As a result, we found that our production was often delayed or bumped to the back of the queue for larger projects. So, we decided to look at taking the entire responsibility for manufacturing in-house."

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CTO

Auvideo GmbH

Auvideo already had a small SMT production machine but wanted to look closely at all the major SMT machine manufacturers as a next step and quickly chose Panasonic. "At first, we were worried that Panasonic would view us as too small but they quickly dispelled that thought," said Oliver. "They could see our potential and we could see a path to growing with them."



Unlike other manufacturers with long lead times for machinery orders, Panasonic also had the ideal SMT production machine available right away – the Panasonic AM100. "It was the most efficient and flexible machine we viewed and it could be delivered immediately to fulfil an important large customer order," Oliver commented.



Solutions to meet all needs

The AM100 meets the highest standards of reliability, capacity and flexibility in a cost-efficient, scalable and high-mix SMT solution. It only takes one machine to begin production and extra units or technologies can be easily integrated according to requirements.

The single-head (single beam) of Panasonic's AM100 modular placement machine is able to place an impressive component array including: 0402 mm to 120 x 90 x 2.8mm, odd-shaped components, large connectors, as well as advanced packaging types.

Backed by a reliable and highly efficient production system, Auvideo continued to grow and subsequently added a larger Panasonic NPM-W2 machine. With straightforward compatibility and integration, they then moved to an entire Panasonic NPM-W2 production line with SPG2 printer and installed Panasonic's PanaCIM smart factory software suite for material management.

Industry-leading equipment

The NPM-W2 machine line produces even higher productivity and quality, and with the integration of the SPG2 printer, NPM-W2 placement machine and inspection processes, makes it one of the most flexible and versatile pick-and-place solutions on the market.



With options for higher speed or accuracy, depending on the PCB requirements, the NPM-W2 is also optimised for larger boards and larger components.

The PanaCIM software suite is used to effectively manage the SMT production process from components inbound to the warehouse, through to material preparation and verification. The software is fully integrated with the Inovaxe Reel Storage Tower. Moving forward PanaCIM modules can be added to manage the entire SMT production process.



Delivering advantages

Auvideo reports that the Panasonic production solution offers a number of significant advantages:

- Auvideo uses a very broad variety of components and the Panasonic SMT production machines, with multifunctional head, enable one machine to be configured for many different processes and boards.
- Efficient and secure material feeder preparation is provided, alongside offline feeder preparation using the installed Offline Unit Station. Thanks to the memory function, feeders can be taken off and reinserted without manually pairing them again. The machines detect which material is loaded and the roll is paired with the feeder memory.
- The Panasonic solutions are also future-proofed. For example, when production was upgraded to the NPM-W2 machines, they could be installed without any further updates to the existing software and feeder equipment.
- With total control of its production process, Auvideo already has a reputation for quality production but moving forward it plans to focus even further on traceability and enhanced quality using the Panasonic machinery functionality and insights provided through its software solutions.

Critical future partner

Looking to the future, Oliver sees Panasonic as a critical partner for Auvidia and integral to its expansion plans of doubling production capacity over the next 3 years.



“Panasonic is always there to help us set-up our systems and supports us quickly with any questions and maintenance requirements. We have never had a production line stoppage in the six years we have worked with Panasonic,” he explained.

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