

CASE STUDY

Enhanced Remote Customer Support

Customer

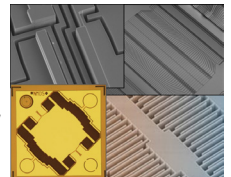
Teledyne Micralyne has provided innovative solutions to hundreds of companies since 1982, helping to develop and reliably manufacture some of the smallest actuators, sensors and 3D mechanical structures in existence in a host of high profile brands. Teledyne Micralyne has proven to be a highly competent and trusted MEMS fabrication partner of leading high-tech companies for more than 30 years. See www.teledynemicralyne.com



Application

Teledyne Micralyne uses SPTS's Si DRIE and oxide etch technologies to manufacture wide range of MEMS devices, such as:

- Optical MEMS – Silicon Optical Benches, Mirror Arrays, Actuation, Spatial Light Valves, Optical/Digital Imaging
- BioMed MEMS – Micro-Needles, Molecular Diagnostic Assays, Microfluidic Chips
- Application-specific MEMS – Pressure Sensors, Inertial Sensors, Gas Detection Sensors
- Microfabrication – Micro-assemblies, Medical Devices, Industrial Tooling



Background

Providing a high level of customer support in the semiconductor industry is always demanding. To provide the same level of support during the global COVID-19 crisis was an additional challenge. The situation included travel restrictions and quarantine protocols, making it impossible to get hardware and process onsite support for a system commission. Onsite SPTS personnel are usually considered essential for installing new equipment, performing process verification, and troubleshooting equipment issues. A new and advanced method for remote customer support was successfully implemented with Micralyne in 2020 during the commissioning of a new Synapse™ etch module. SPTS can offer this solution for selected procedures, to customers needing a secure and time-saving alternative to hosting an onsite SPTS engineer, both now and into the future when travel restrictions are removed.



OBJECTIVE

- Provide a new level of remote customer support to navigate pandemic restrictions.
- Ensure new system installation acceptance with minimal delays and no more than 3 days longer than the original agreed schedule.
- Enable onsite customer engineers to troubleshoot and resolve process and equipment tasks normally requiring onsite SPTS engineers.

SOLUTION

- Increase remote SPTS support levels covering new customer needs.
- Evaluate visual support software platforms to provide a “second set of eyes” to help customer troubleshoot and resolve problems efficiently.
- Evaluate enhanced data review and analysis techniques to streamline data feedback.

RESULTS

- Provided a quick-turn on setup, install and commissioning items for a new Synapse™ etch process module.
- Leveraged onsite experience from the customer to impactfully resolve issues.
- Delivered pathfinding support on improved SPTS digital service offerings.

“SPTS was able to pivot during an extremely challenging time for all businesses and successfully help us set up and qualify a new etch cluster tool using remote customer support. We look forward to continuing to grow and strengthen our business relationship.”

Steve Bonham, Plant Manager Teledyne Micralyne



SPTS Technologies, A KLA company, designs, manufactures, sells, and supports etch, PVD, CVD and MVD[®] wafer processing solutions for the MEMS, advanced packaging, photonics, high speed RF, and power device markets. For more information about SPTS Technologies, email enquiries@spts.com or visit www.orbotech.com/spts