

**PRESS RELEASE**

## **SST Vacuum Reflow Systems Launches Automated Vacuum Pressure Soldering System for IGBT Power Module Market**

*Specifically designed to deliver the highest quality electronic packaging for power modules in automotive and commercial applications*

**Carlsbad, CA – May 2, 2019** – [Palomar Technologies](#), a global leader in total process solutions for advanced photonics and microelectronic device packaging, announced that SST Vacuum Reflow Systems, a wholly owned subsidiary of Palomar Technologies, has launched the SST 8300 Series Automated Vacuum Pressure Soldering System. The series, consisting of single and triple chamber systems provides a highly reliable solder connection with a better than industry standard void rate – a key to delivering high-reliability power modules for automotive and commercial applications.

A.J. Wilson, President of SST Vacuum Reflow Systems and CMO for Palomar Technologies commented, “The electric vehicle market is exploding and one key to the successful rollout is mass availability of affordable and reliable power modules. In addition to higher volumes, power modules are expected to be more efficient and to be able to operate under more stressful conditions, such as higher temperatures and more power cycles. Our new automated vacuum pressure soldering system succeeds in providing both high volume and high reliability for the assembly of power modules.”

The [SST 8300 Series Automated Vacuum Pressure Soldering System](#) differs from current systems on the market by utilizing SST’s unique system of applying both vacuum and gas pressure to achieve an extremely low void ratio for the soldering interface of key components inside a power module, especially for DBC-to-baseplate soldering. The power module market is actively seeking a flux-free solder process that achieves low void rates, which provide for higher reliability and longer life. Other industry segments with a demand for highly reliable power modules include power converters for wind turbines, photovoltaic solar energy systems, and other renewable energy applications, as well as industrial motor controls and large scale medical devices. Specific applications include: IGBT/SiC/GaAs/GaN die attach, CPV solar cell assembly, die attach for pressure sensors, hermetic



sealing of high-reliability packages, high intensity LED attach, hermetic sealing of IR image sensors, copper clip soldering, high power laser module assembly, and multilayer ceramic capacitors.

Other key benefits of the 8300 Series include:

1. Automated high-volume production vacuum pressure soldering system
2. Enables low-void solder connections with preforms or with solder paste
3. Offers maximum flexibility for processing a wide range of solder alloys and other alternative interconnect materials
4. Each chamber of the SST 8303 runs a complete process allowing multiple processes to be run in parallel
5. Flexible configuration for any production line: single (8301) or triple (8303) chamber
6. Oxide removal technology using formic acid or forming gas

More information on the SST 8300 Series Automated Vacuum Pressure Soldering System can be found at: [SST 8300](#). The new system can be seen at the SMTconnect exhibition in Nuremburg, Germany from May 7 – 9, 2019. Palomar Technologies and SST Vacuum Reflow Systems are located in [booth #4A-347](#).

### **About Palomar Technologies**

Palomar Technologies makes the connected world possible by delivering a Total Process Solution™ for advanced photonic and microelectronic device assembly processes utilized in today's smart, connected devices. With a focus on flexibility, speed and accuracy, Palomar's Total Process Solution includes [Palomar die bonders](#), [Palomar wire and wedge bonders](#), [SST vacuum reflow systems](#), along with [Innovation Centers](#) for outsourced manufacturing and assembly, and [Customer Support](#) services, that together deliver improved production quality and yield, reduced assembly times, and rapid ROI.

With its deep industry expertise, Palomar equips customers to become leaders in the development of complex, digital technologies that are the foundation of the connected world and the transmission of data generated by billions of connected devices. Palomar solutions are utilized by the world's leading companies providing solutions for datacom, 5G, electric vehicle power modules, autonomous vehicles/LiDAR, enhanced mobile broadband, Internet of Things, SMART technology, and mission-critical services.

Headquartered in Carlsbad, California, Palomar offers global sales, service and application support from its offices in the USA, Germany, Singapore and China. For more information, visit: <http://www.palomartechnologies.com>

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