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Editorial
Contact:

Bob Decker
Redpines

Telephone: 1 415 409 0233
Email: bob.decker@redpinesgroup.com

For Immediate Release

Vishay Intertechnology Plant in Borgaro Turin, Italy, Receives R&D Grant for SiLA Project

***Project to Focus on Silicon Wafer Processing Through Laser Annealing to
Improve Electric and Thermal Behavior in FRED Pt® Diodes***

Silicon Laser Annealing Process

MALVERN, Pa. – Aug. 3, 2022 – Vishay Intertechnology, Inc. (NYSE:VSH) today announced that the company's facility in Borgaro Torinese, Italy, has received a research results R&D grant from the European Union and the Regional Government of Piedmont for its Silicon Laser Annealing (SiLA) project. The project will focus on the study and development of advanced low temperature processes to locally and selectively control the energy transferred to chips during fabrication.

The automotive market sector is continually increasing the efficiency of full-electric engines, which is driving the definition of new design rules for their electronic components. As a world leader in power semiconductors, Vishay's goal is to meet the need for advanced 600 V to 1200 V diodes, IGBTs, and MOSFETs for electric (EV) and hybrid electric (HEV) vehicles. With the SiLA project, the company will apply thin wafer technology to its FRED Pt® fast recovery diodes to improve their electric and thermal behavior, and guarantee efficiency improvements for energy conversion in battery chargers and motor controls for powertrains. This will allow for a further acceleration of new device adoption in the e-mobility market.

The main objectives of the SiLA project are to study and develop laser annealing technology to obtain: thermal dissipation improvements; reduced energy losses from conduction and switching; increased roughness in dynamic conditions; and a definition of new technological processes based on scientific activities fully developed in the Piedmont area. A project partner



specializing in power lasers will share different laser sources and its know-how to realize an engineering laser system. All activities will be used as milestones and baselines to support the development of a new Vishay diode family and fabrication process.

Funding for the SiLA project (codes 337- 296 and 338- 296) grant was provided through Regional Operational Program (ROP) ERDF 2014-2020, Axis1, Act. I.1b.1.2 PRISM-E Call 2018 to support, in synergy with local partners' R&D efforts, activities for developing new technologies.

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Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**[™] Vishay Intertechnology, Inc. is a Fortune 1,000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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