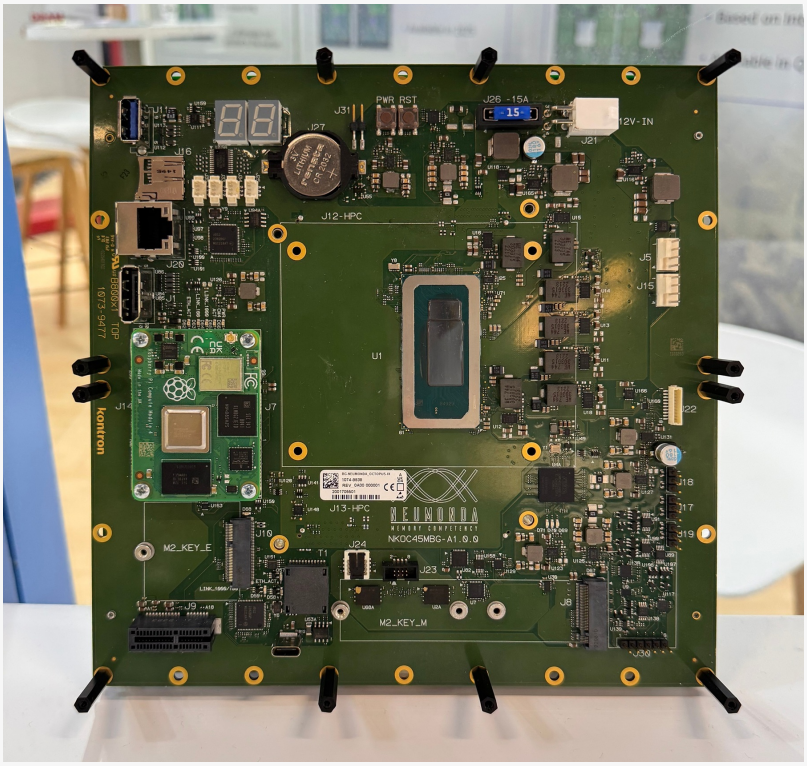
Neumonda unveils Octopus DRAM tester tailored for the testing and qualification of DRAM components for memory modules

The test board was designed with the help of Kontron and will be available in Q3 2025



The new Neumonda Octopus Tester

FRANKFURT / BAD HOMBURG, GERMANY, May 12, 2025 /EINPresswire.com/ -- Neumonda Technology launches its newest DRAM test board, code-named Octopus. Neumonda's Octopus tester is based on the Intel Raptor Lake CPU, and is designed for the screening of DRAM components for memory modules, while the previous tester generation, the Neumonda Rhinoe Test Board, is designed for the testing of DRAM components for industrial applications. The Neumonda Octopus DRAM Test Board can test at high and low temperatures, as well as low to high speeds, to simulate the speed and noise environment in which DRAM modules will be working.

"During a DRAM component test, about two or three percent of the components fail," explained Peter Poechmueller, CEO of Neumonda Technology. "However, if only modules are tested, the fail rate is about ten times higher. With our Octopus tester, the yield as well as the quality of DRAM modules for industrial uses can be significantly improved, especially at cool temperatures."

NEUMONDA Technology, the IP and innovation arm of the NEUMONDA Group, is dedicated to dramatically reducing the efforts of burn-in and array testing at speed of DRAM memory components and modules. For its Octopus board, Neumonda partnered with Kontron and its Product Center Custom, which specializes in semi- and full-custom solutions tailored to individual application requirements. Kontron manufactures the individual tiles for the tester

based on Neumonda's specifications and design guidance.

As a service provider in electronic development and manufacturing, Kontron's Custom team contributed its extensive x86 design experience in partnership with Neumonda and provided the digital design for the Octopus test board. Kontron's customer-centric approach includes project and lifecycle management to ensure product consistency, long-term availability, and reduced time-to-market for complex developments.

Neumonda Group Logo

The Neumonda Octopus DRAM Test Board consists of six individual tiles that simulate a motherboard and are equipped with an Intel Raptor CPU each. A Raspberry Pi controls the test setup and the configuration of the Neumonda test patterns and stores the test results for their final evaluation. On the back of each board, Octopus has sockets for 32 components, which can be replaced with sockets for two modules.

> During a component test, about 2-3% of the DRAMs fail. If only the modules are tested, the fail rate is about ten times higher. Our Octopus tester increases the yield and quality of DRAM modules."
>
> *Peter Poechmueller, CEO of Neumonda Technology*

Octopus is designed for the testing of DDR4 and DDR5 x8 and x16 components for DRAM modules as well as LPDDR4 and LPDDR5 DRAMs. It can sort out defective or weak DRAM memory devices with accurate fault coverage as effectively as any traditional tester that is commonly used in most backend factories today.
Like the Rhinoe Tester, the Octopus tester consumes considerably less power compared to traditional testers, which directly translates to reduced testing costs, and it is effectively more environmentally friendly. The Neumonda Octopus DRAM Test Board will be commercially available in Q3 2025.

About Kontron
Kontron AG (www.kontron.com, ISIN AT0000A0E9W5, WKN A0X9EJ, KTN) is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From

automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 7,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

About NEUMONDA Technology
NEUMONDA Technology was founded in 2021 by former Qimonda employees that hold several patents in DRAM memory and testing, with the aim to tackle some of the most pressing pain points of industrial customers. NEUMONDA Technology is the innovation arm of the NEUMONDA Group that also includes the memory manufacturer Intelligent Memory and the memory competence center MEMPHIS Electronic. This makes the NEUMONDA to the holding that governs the most complete specialty memory portfolio. www.neumonda.com

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