Crucial® NVDIMMs

Persistent memory performance

In fast-paced business environments, sales and customer satisfaction are decided in milliseconds. Crucial® NVDIMMs give your organization the advantage when data transactions hang in the balance by fusing memory with on-module NAND, which gives you near-instant access with data persistence. Crucial NVDIMMs safeguard data during power loss, remove I/O bottlenecks that are holding your servers back, and increase the performance of server applications such as Big Data analytics, storage appliances, RAID cache, in-memory databases, and online transaction processing by utilizing the data needing fast access in memory.[1]

Preserve access to critical data

Not only do Crucial NVDIMMs accelerate your servers, they're also nonvolatile, which improves system data security. In the event of power loss, standard memory would lose all data in RAM, while an NVDIMM will retain it. If power is lost, the system controller sends a hardware signal to the NVDIMM to perform a backup operation. The NVDIMM controller isolates the system bus by enabling on-module data multiplexers (MUXs). Then, the NVDIMM controller activates the power management circuitry, drawing power from the ultracapacitor and providing energy to the NVDIMM for the backup operation. The controller then manages the transfer of data from the DRAM into the onboard NAND. Once system power is restored, data is transferred from the NAND back to the DRAM.

Accelerate applications by partitioning your data

The low latency and persistence of Crucial NVDIMMs allow you to get more out of hot data, metadata, tables, and journals without the need to spend costly latency cycles caching data to storage tiers that are much slower. Plus, storing the rest of your data on an SSD that delivers the next fastest storage access optimizes the performance and reliability of your systems. Crucial NVDIMMs are ideal for Big Data analytics, storage appliances, RAID cache, in-memory database, and online transaction processing because these types of applications need the shortest possible route between memory and storage.
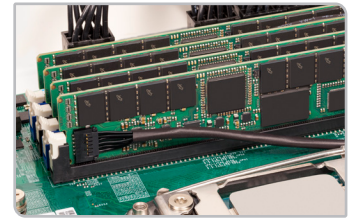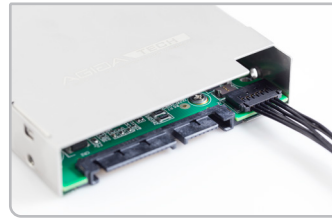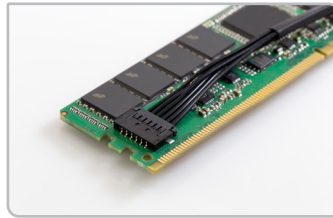
Combine performance and low latency with persistence

DRAM and NAND inherently address different memory issues. DRAM supplies the best memory performance and lowest latency. NAND, on the other hand, supplies higher density as well as data persistence. When put together in Crucial NVDIMMs, you get high-capacity memory modules aided by JEDEC-approved firmware, speeds starting at 2133MT/s, and densities starting at 8GB, supported by the safety net of NAND storage to limit costly downtime and provide persistent data integrity in the event of system power loss.

Backed by the Reliance Program[2] | ⓡ RELIANCE

When you make an enterprise-level investment in Crucial products, we believe you deserve a higher level of support. The Reliance Program offers qualified customers up to four additional benefits that affirm our commitment to your servers through service call reimbursements, on-site spares, 24/7 technical support through our direct hotline, and special bulk shipping options.

PRODUCT HIGHLIGHTS

- Fuses DRAM and NAND into a single module, providing the performance of DRAM with the persistence of NAND
- Preserves critical data in the event of power loss and limits costly downtime
- Speeds starting at 2133 MT/s
- Ideal for server applications such as Big Data analytics, storage appliances, RAID cache, in-memory database, and online transaction processing
- Compatible with AgigA Tech® PowerGEM® ultracapacitor, enabling continual power to the NVDIMM during power loss until a backup is completed
- JEDEC-standard interface
- Backed by the Reliance Program[2]
- Limited lifetime warranty

Crucial DDR4 NVDIMM modules

PART NUMBER	DENSITY	MODULE TYPE	SPEED	MODULE BANDWIDTH	VOLTAGE	FIRMWARE
CTA18ASF2G72PF1Z-2G6V21AB	16GB	NVDIMM 288-pin	2666MT/s	21.3 GB/s	1.2V	JEDEC
CTA18ASF1G72PF1Z-2G1T12AB	8GB	NVDIMM 288-pin	2133MT/s	17.0 GB/s	1.2V	JEDEC

AgigA Tech® PowerGEM® ultracapacitor

PART NUMBER	FORM FACTOR	FIRMWARE SUPPORTED	BOX CONTENTS
MTA001A16BA-003	2.5-inch drive	JEDEC and Legacy	AgigA Tech® PowerGEM® ultracapacitor 740mm cable connector 4 mounting screws

Micron® quality — a higher level of reliability
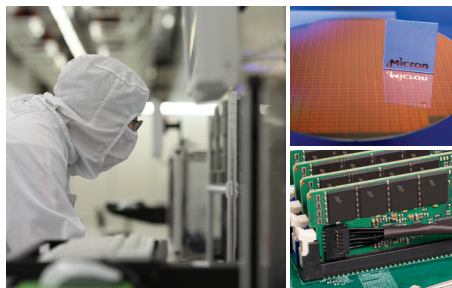
Server memory that's built to last requires lasting industry relationships and technology collaboration over multiple product cycles. As a brand of Micron, we work closely with the industry leaders in CPU and platform development, along with the leading server and motherboard manufacturers to enable the next level of memory technology. The result? More than 35 years of expertise that's poured into die selection, DRAM and PCB design, module assembly, and testing from start to finish. This can only be achieved by a true memory manufacturer – don't settle for anything less.

Limited lifetime warranty valid everywhere except Germany, where warranty is valid for 10 years from date of purchase.

1. Crucial NVDIMMs require a compatible hardware platform and BIOS.

2. Reliance Program benefits may vary and are only available to qualified customers in select regions. Contact your Crucial sales representative for more information.

REVISION: 11/1/2016

crucial
by Micron