

DDR3 NVDIMM

SMART has developed a family of NVDIMMs targeted for RAID storage applications. During normal operation, the NVDIMM will function as a standard RDIMM module, but during a system power interruption, the NVDIMM backs up the DRAM contents into on-board Flash with no need for batteries. When the power is restored, the contents of the Flash are transferred back into the DRAM with no loss of critical data.

Application

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• Nonvolatile cache backup for RAID storage systems

Benefits

- Eliminates need for batteries and their associated issues (cost, maintenance, environmental, etc)
- Eliminates need to maintain a duplicate cache memory subsystem separate from main memory
- Simplifies memory system design
- Allows for increased cache backup size
- Saves costs and space

Key Features & Specs

- Fits standard 240-pin & 244-pin form factors
- During normal operation, NVDIMM will function as a standard RDIMM module (supports JEDEC standard SPD Data)
- System upon power-loss, must place the DRAM in self-refresh operation (in current design offering)
- Backup initiated using either side-band signals or I2C interface
- Greater than 10 year life span operating at 70°C ambient temperature.



With SMART's SafeStor[™] Technology

Ordering Information

240 PIN - DDR3 NVDIMM											
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Command Set				
SH1027NV351816SE	8GB	30.00	1G x72	512M x8	1600 MT/s	1.35V	SMART				
SH1027NV351816HD	8GB	30.00	1G x72	512M x8	1600 MT/s	1.35V	SMART				
SH1027NV351816SD	8GB	30.00	1G x72	512M x8	1600 MT/s	1.35V	SMART				
SH5127NR351893SDV	4GB	24.00	512M x72	512M x8	1333 MT/s	1.5V	SMART				



NVDIMM (24mm)

244 PIN - DDR3 Mini-NVDIMM SMART Part Number Density Height (mm) Module Config Device Config Speed Voltage Command Set											
Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Command Set					
2GB	30.00	256M x72	256M x8	1333 MT/s	1.35V	SMART					
	Density	Density Height (mm)	Density Height (mm) Module Config	Density Height (mm) Module Config Device Config	Density Height (mm) Module Config Device Config Speed	Density Height (mm) Module Config Device Config Speed Voltage					

Mini-NVDIMM

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