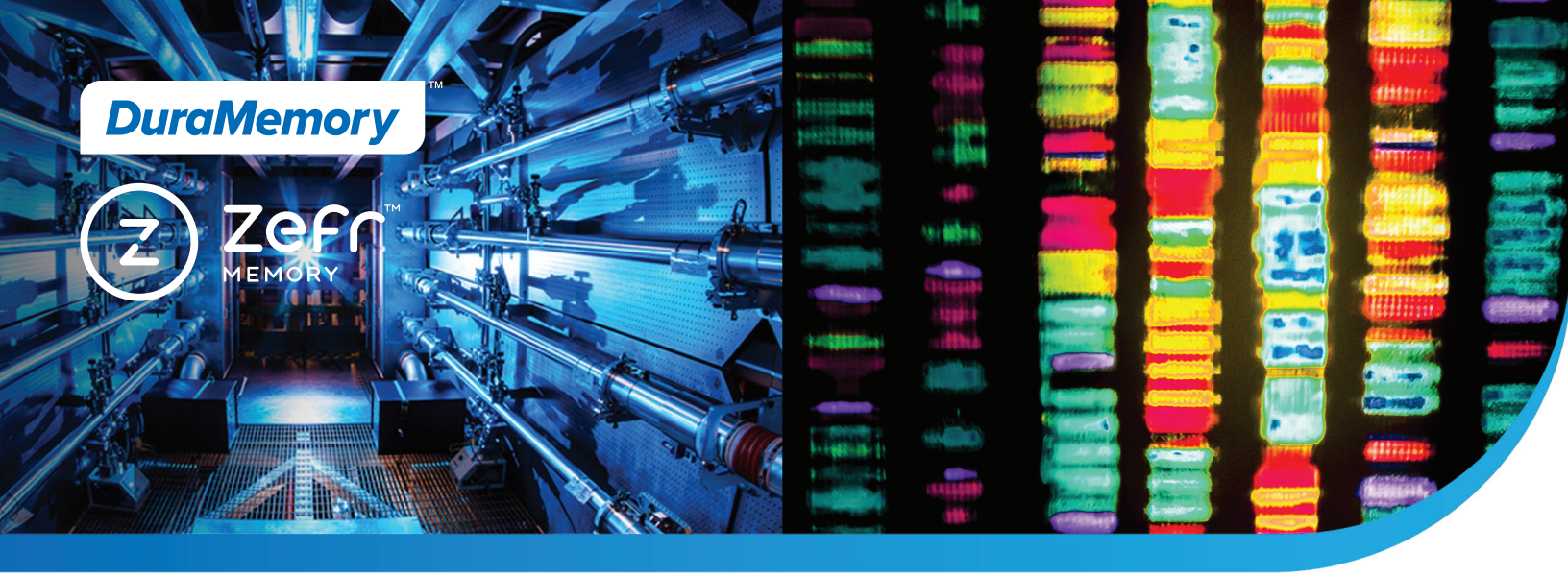


SMART DRAM Memory for High Performance Computing (HPC) Applications

Reliable, Trusted, Proven

Why SMART for HPC?

SMART offers Zefr Memory for HPC, which is designed to hold up under the stress of intense computational workloads. Reliable, maintenance-free memory is important to maintain operations and save on costs. SMART ships the highest quality, most reliable memory modules to its customers.

What is Zefr Memory?

- Zefr (Zero Failure Rate) is a screening process performed on OEM original memory modules or SMART Modular built memory modules delivers ultra-high reliability for demanding workloads
- Provides the most highly reliable memory for maintaining uninterrupted service
- Provides the highest densities and speeds for processing large amounts of data

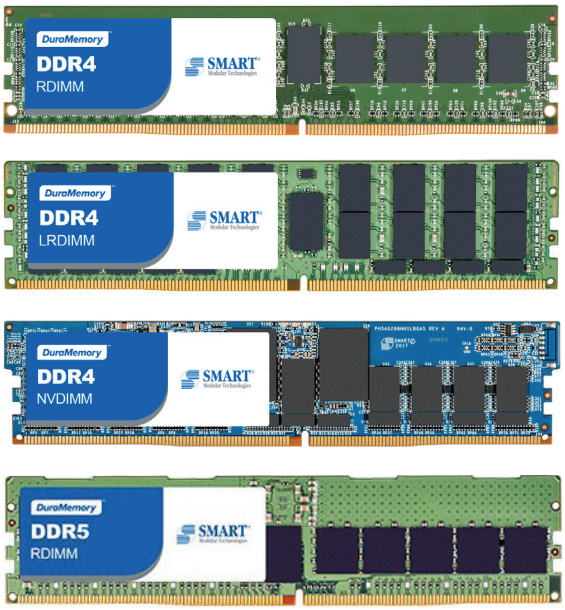
Chipkill

- SMART supports systems equipped with Chipkill, x4 DRAM
- Protects computer memory systems from any single memory chip failure as well as multi-bit errors from any portion of a single memory chip
- Chipkill uses replacement DRAM when failure occurs

Service and Support:

- SMART's engineering team provides pre-sale and post-sale technical assistance for system configuration, technical support and failure analysis
- SMART's professional worldwide sales organization uses a consultative sales approach, provides excellent service and is backed with speedy RMA support for on-time delivery

HPC Memory



Applications

- Drug Development - used to develop cures for diseases like diabetes, cancer and to enable faster, more accurate patient diagnosis
- Oil Exploration - Used to more accurately identify where to drill for new wells and to help boost production from existing wells
- Automotive, Aerospace Design and Modeling - Used to design new products, simulate test scenarios, and make sure production lines aren't held up
- Banking and Financial Services - Used to detect credit card fraud, track real-time stock trends and automate trading

DDR5 Ordering Information

288-PIN - DDR5 RDIMM							
SMART Part Number	Density	Height (mm)	Module Config.	Device Type	Speed	Voltage	Temperature
SRBG8RD544H-SB	256GB	31.25	32Gb x80	16Gx4	5600MT/s	1.1V	0°C to +70°C
STAG8RD544H-HA	128GB	31.25	16Gb x80	8Gx4	5600MT/s	1.1V	0°C to +70°C
SRAG8RD5848-MB	128GB	31.25	16Gb x80	8Gx4	5600MT/s	1.1V	0°C to +70°C
SRAG8RD5846-SB	128GB	31.25	16Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SRZAG8RD5846-SB	128GB	31.25	16Gb x80	8Gx4	4800MT/s	1.1V	0°C to +70°C
SRHG8RD5648-SP	96GB	31.25	12Gb x80	6Gx4	5600MT/s	1.1V	0°C to +70°C
SRZHG8RD5648-SP	96GB	31.25	12Gb x80	6Gx4	5600MT/s	1.1V	0°C to +70°C
STHG8RD5648-HM	96GB	31.25	12Gb x80	6Gx4	5600MT/s	1.1V	0°C to +70°C
SRHG8RD5648-MD	96GB	31.25	12Gb x80	6Gx4	5600MT/s	1.1V	0°C to +70°C
SRHG8RD5645-SB	96GB	31.25	12Gb x80	6Gx4	4800MT/s	1.1V	0°C to +70°C
STHG8RD5645-HM	96GB	31.25	12Gb x80	6Gx4	4800MT/s	1.1V	0°C to +70°C
SRHG8RD5645-MD	96GB	31.25	12Gb x80	6Gx4	4800MT/s	1.1V	0°C to +70°C
SR8G8RD5448-MD	64GB	31.25	8Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SR8G8RD5448-SP	64GB	31.25	8Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SRZ8G8RD5448-SP	64GB	31.25	8Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
ST8G8RD5448-HA	64GB	31.25	8Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SRB8G8RD5445-SB	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
ST8G8RD5445-HA	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
STZ8G8RD5445-HA	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SRI8G8RD5445-SB	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	-40°C to +85°C
SR8G8RD5445-SB	64GB	31.25	8Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SR6G8RD5648-SP	48GB	31.25	6Gb x80	6Gx4	5600MT/s	1.1V	0°C to +70°C
SR6G8RD5385-SB	48GB	31.25	6Gb x80	3Gx8	4800MT/s	1.1V	0°C to +70°C
SR6G8RD5645-SB	48GB	31.25	4Gb x80	6Gx4	4800MT/s	1.1V	0°C to +70°C
ST6G8RD5645-HM	48GB	31.25	6Gb x80	6Gx4	4800MT/s	1.1V	0°C to +70°C
SR4G8RD5448-SP	32GB	31.25	4Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
ST4G8RD5448-HA	32GB	31.25	4Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SR4G8RD5288-SP	32GB	31.25	4Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SRZ4G8RD5288-SP	32GB	31.25	4Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
ST4G8RD5288-HA	32GB	31.25	4Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SR4G8RD5448-MD	32GB	31.25	4Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SRZ4G8RD5448-SP	32GB	31.25	4Gb x80	4Gx4	5600MT/s	1.1V	0°C to +70°C
SRI4G8RD5445-SB	32GB	31.25	4Gb x80	4Gx4	4800MT/s	1.1V	-40°C to +85°C
SRB4G8RD5445-SB	32GB	31.25	4Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SRZ4G8RD5445-SB	32GB	31.25	4Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SR4G8RD5445-SB	32GB	31.25	4Gb x80	4Gx4	4800MT/s	1.1V	0°C to +70°C
SRI4G8RD5285-SB	32GB	31.25	4Gb x80	2Gx8	4800MT/s	1.1V	-40°C to +85°C
SR4G8RD5285-SB	32GB	31.25	4Gb x80	2Gx8	4800MT/s	1.1V	0°C to +70°C
SR3G8RD5388-SP	24GB	31.25	3Gb x80	3Gx8	5600MT/s	1.1V	0°C to +70°C
ST3G8RD5385-HM	24GB	31.25	3Gb x80	3Gx8	4800MT/s	1.1V	0°C to +70°C
SR3G8RD5385-SB	24GB	31.25	3Gb x80	3Gx8	4800MT/s	1.1V	0°C to +70°C
SR2G8RD5288-MD	16GB	31.25	2Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
ST2G8RD5288-HA	16GB	31.25	2Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SR2G8RD5288-SP	16GB	31.25	2Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SR2G8RD5285-SB	16GB	31.25	2Gb x80	2Gx8	4800MT/s	1.1V	0°C to +70°C
SRI2G8RD5285-SB	16GB	31.25	2Gb x80	2Gx8	4800MT/s	1.1V	-40°C to +85°C
SRZ2G8RD5285-SB	16GB	31.25	2Gb x80	2Gx8	4800MT/s	1.1V	0°C to +70°C
SR4G8RD5288SBV	32GB	18.75	4Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SR4G8RD5288SPV	32GB	18.75	4Gb x80	2Gx8	5600MT/s	1.1V	0°C to +70°C
SR4G8RD5285SB	32GB	31.25	4Gb x80	2Gx8	4800MT/s	1.1V	0°C to +70°C

DDR4 Ordering Information

288-PIN - DDR4 RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST3277RD440465-SM	256GB	31.25	32Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST3277RD440465-HJ	256GB	31.25	32Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SR3277RD440444-SM1	256GB	31.25	32Gb x72	4Gx4	2933MT/s	1.2V	0°C to +70°C
SRZ1637RD440465-SM	128GB	31.25	16Gb x72	8Gx4	3200MT/s	1.2V	0°C to +70°C
SRZ8197RD440425-SC	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST8197RD440425-HD	64GB	30.75	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SRI8197RD440425-SC	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	-40°C to +85°C
ST8197RD440425-SC	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST8197RD440425-MF	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SRZ728G4PNG32P2-SC	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST8197RD440425HC	64GB	31.25	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST8197RD420893MF	64GB	24.40	8Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST4097RD420825SC	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STT4097RD420825MF	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
SRZ4097RD420825-SC	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STI4097RD420825MF	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
SR4097RD420825-SC	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
SRI4097RD420825-SC	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
ST4097RD420425-HE	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
SRZ4097RD440425-SC	32GB	31.25	4Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SR4097RD440425-SC	32GB	31.25	4Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST4097RD440425-MF	32GB	31.25	4Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SRI4097RD420425-SE	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	-40°C to +85°C
ST4097RD420425-SE	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
ST4097RD420425-MR	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
STB4097RD420425-SE	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
STB4097RD420425-MR	32GB	31.25	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
SRI2047RD410825-SE	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	-40°C to +85°C
STI2047RD410825SG	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	-40°C to +85°C
SRZ2047RD410825-SE	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
SR2047RD410825-SE	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047RD420425-HE	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
SRI2047RD420425-SE	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	-40°C to +85°C
ST2047RD420425-MR	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
STB2047RD420425-SE	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	-25°C to +85°C
ST2047RD420425-SE	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
ST2047RD410825-HE	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047RD420825MF	16GB	31.25	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 VLP RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST8197RD440425MFV	64GB	19.00	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST2047RD420825SCV	16GB	18.75	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 LRDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SR1637LR440425-SD	128GB	31.25	16Gb x72	8Gx4	3200MT/s	1.2V	0°C to +70°C
ST1637LR440414-SM1	128GB	31.25	16Gb x72	4Gx4	2933MT/s	1.2V	0°C to +70°C

SMART® Modular Technologies

For more information, please visit: **www.smartm.com**

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