

# DDR4 Memory Modules

SMART Modular Technologies supports a complete lineup of DDR4 memory modules. These include VLP-DIMM, SODIMM, Mini-RDIMM, Mini-UDIMM, and LRDIMM. SMART's DDR4 modules range from 32GB to 4GB, configured as x4 and x8 running at DDR4-2400 and DDR4-2133 speed grades. SMART conducts a rigorous design review process to ensure optimal performance and reliability. SMART also offers economic Value Memory in DDR4.

### Features & Benefits

- 20% lower overall power vs. DDR3
- 1.2V VDD
- Write Cyclic Redundancy Check (CRC) is supported at all speed grades to assure better reliability in systems
- Higher speeds starting at DDR4-2400



## DDR4 Ordering Information

### 288 PIN - DDR4 NVDIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097NJ44D472SB	32GB	31.25	4Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
ST2047NJ420425HC	16GB	31.25	2Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
ST2047NJ420414SC	16GB	31.25	2Gb x72	2Gx4	2933MT/s	1.2V	0°C to +70°C
ST2047NJ420493HC	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047NJ420493SC	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C

### 288-PIN - DDR4 RDIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST8197RD440414HA	64GB	31.25	8Gb x72	4Gx4	2933MT/s	1.2V	0°C to +70°C
ST8197RD440414SA	64GB	31.25	8Gb x72	4Gx4	2933MT/s	1.2V	0°C to +70°C
STI4097RD420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	-40°C to +85°C
ST4097RD420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST4097RD420893SA	32GB	31.25	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047RD410814SC	16GB	31.25	2Gb x72	1Gx8	2933MT/s	1.2V	0°C to +70°C
STI2047RD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2047RD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047RD420493SC	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047RD410472SE	16GB	31.25	2Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
ST2047RD410872SC	16GB	31.25	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047RD420472SC	16GB	31.25	2Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
STI1027RD410493SE	8GB	31.25	1Gb x72	1Gx4	2666MT/s	1.2V	-40°C to +85°C
STI1027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
STI027RD410493SE	8GB	31.25	1Gb x72	1Gx4	2666MT/s	1.2V	0°C to +70°C
STI027RD410493SEV	8GB	31.25	1Gb x72	1Gx4	2666MT/s	1.2V	0°C to +70°C
STI027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI1027RD451893SF	8GB	31.25	1Gb x72	512Mx8	2666MT/s	1.2V	-40°C to +85°C
STI027RD451893SF	8GB	31.25	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI027RD451893SFV	8GB	18.75	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI027RD410472SE	8GB	31.25	1Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
STI027RD451872SE	8GB	31.25	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127RD451893HB	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893SE	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893SF	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451872HB	4GB	31.25	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C

DDR4

# DDR4 Ordering Information

288-PIN - DDR4 Mini-RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2047MR410893HC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047MR410893SC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047MR410872HC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047MR410872SC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST1027MR451893SF	8GB	30	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST1027MR451872SE	8GB	30	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 ULP Mini-RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST1027MR410893SCU	8GB	17.78	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 VLP Mini-RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2047MR420825SAV	16GB	18.75	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047MR420893SAV	16GB	18.75	2Gb x72	2Gx8	2666MT/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
ST4097RD420825SAV	32GB	18.75	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
ST4097RD440425HAV	32GB	18.75	4Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST4097RD440425SAV	32GB	18.75	4Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
ST4097RD420893HAV	32GB	18.75	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST4097RD420893MBV	32GB	18.75	2Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST4097RD420893SAV	32GB	18.75	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST4097RD440493SAV	32GB	18.75	4Gb x72	4Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047RD420825SAV	16GB	18.75	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STI2047RD420493SCV	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	-40°C to +85°C
ST2047RD410893SCV	16GB	18.75	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047RD420493HCV	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047RD420493SCV	16GB	18.75	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047RD410872SCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047RD420472HCV	16GB	18.75	2Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
ST2047RD420472HDV	16GB	18.75	2Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
ST1027RD410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027RD451893SEV	8GB	18.75	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893HBV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893SFV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451872HBV	4GB	18.75	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127RD451851SEV	4GB	18.75	512Mb x72	512Mx8	2133MT/s	1.2V	0°C to +70°C
260-PIN - DDR4 Non-ECC SO-DIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STI2046SO410893SC	16GB	30	2Gb x64	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2046SO410893SC	16GB	30	2Gb x64	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1026SO410893SC	8GB	30	1Gb x64	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1026SO451893SF	8GB	30	1Gb x64	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST1027SO451893SF	8GB	30	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5126SO451893SF	4GB	30	512Mb x64	512Mx8	2666MT/s	1.2V	0°C to +70°C
STB5126SO451893SF	4GB	30	512Mb x64	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5126SO451872SE	4GB	30	512Mb x64	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST2566SO421693SF	2GB	30	256Mb x64	256Mx16	2666MT/s	1.2V	0°C to +70°C
ST2566SO421672SE	2GB	30	256Mb x64	256Mx16	2400MT/s	1.2V	0°C to +70°C
ST2566SO421672SF	2GB	30	256Mb x64	256Mx16	2400MT/s	1.2V	0°C to +70°C
260-PIN - DDR4 ECC SO-DIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STI2047SO410893SC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2047SO410893HC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047SO410893SC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047SO410872HC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI1027SO410893SC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST1027SO410893HC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027SO410893SC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C

# DDR4 Ordering Information

260-PIN - DDR4 ECC SO-DIMM continued							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STI1027SO451893SF	8GB	30	1Gb x72	512Mx8	2666MT/s	1.2V	-40°C to +85°C
STI027SO451893SE	8GB	30	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI027SO410872SC	8GB	30	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI5127SO451893SE	4GB	30	512Mb x72	512Mx8	2666MT/s	1.2V	-40°C to +85°C
STI5127SO451893SF	4GB	30	512Mb x72	512Mx8	2666MT/s	1.2V	-40°C to +85°C
ST5127SO451893SE	4GB	30	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127SO451893SF	4GB	30	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
SH5127SO451872SE	4GB	30	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 Non-ECC UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STI5126UD451893SF	4GB	31.25	512Mb x64	512Mx8	2666MT/s	1.2V	-40°C to +85°C
ST5126UD451693SC	4GB	31.25	512Mb x64	512Mx16	2666MT/s	1.2V	0°C to +70°C
ST5126UD451893SF	4GB	31.25	512Mb x64	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5126UD451872SE	4GB	31.25	512Mb x64	512Mx8	2400MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 ECC UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STI2047UD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2047UD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047UD410851SC	16GB	31.25	2Gb x72	1Gx8	2133MT/s	1.2V	0°C to +70°C
STI027UD451893SE	8GB	31.25	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI027UD451893SF	8GB	31.25	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI1027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
STI027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST5127UD451893ND	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127UD451893SF	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 ECC ULP UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097UD420825SAU	32GB	17.78	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
ST4097UD420893HAU	32GB	17.78	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047UD410893SCU	16GB	17.78	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 ULP Mini-UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097MU44D893SAU	32GB	17.78	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
STI027MU410893SCU	8GB	17.78	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
288-PIN - DDR4 VLP Mini-UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2047MU420825SAV	16GB	18.75	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047MU410893HCV	16GB	18.75	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST2047MU410893SCV	16GB	18.75	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI2047MU410872SCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
ST2046MU410872SCV	16GB	18.75	2Gb x64	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047MU410872HCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047MU410872SCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI027MU410893HCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI027MU410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI027MU451893SEV	8GB	18.75	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI1027MU410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
STI027MU410872HCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI027MU410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST5127MU451893HBV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127MU451893SEV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127MU451872HBV	4GB	18.75	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C

## DDR4 Ordering Information

288-PIN - DDR4 LRDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097LR420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
216 PIN - DDR4 MIP							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2046MP42W614SA	16GB	22.25	2Gb x64	1Gx16	2933MT/s	1.2V	0°C to +70°C
ST1026MP41W693HC	8GB	22.25	1Gb x64	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1026MP41W672SB	8GB	22.25	1Gb x64	1Gx8	2400MT/s	1.2V	0°C to +70°C
STT5126MP451693ME	4GB	22.25	512Mb x64	512Mx16	2666MT/s	1.2V	-40°C to +85°C
ST5126MP451693SC	4GB	22.25	512Mb x64	512Mx16	2666MT/s	1.2V	0°C to +70°C
STT2566MP421693ND	2GB	22.25	256Mb x64	256Mx16	2666MT/s	1.2V	-40°C to +85°C

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