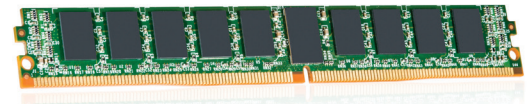


# DDR4 Memory Modules

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 DDR4-2133



## DDR4 Ordering Information

### 288 PIN - DDR4 NVDIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097NJ420472SBL2	32GB	31.25	4Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
ST2047NJ420493SCL2	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047NR420493SCL2	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST1027NJ410493SE	8GB	31.25	1Gb x72	1Gx4	2666MT/s	1.2V	0°C to +70°C
ST1027NJ410472SE	8GB	31.25	1Gb x72	1Gx4	2400MT/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
ST4097RD420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
SH4097RD420472SC	32GB	31.25	4Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
SH2047RD420493SC	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
SH2047RD410472SE	16GB	31.25	2Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
SH2047RD410872SC	16GB	31.25	2Gb x72	1Gx8	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
SH11027RD410493SE	8GB	31.25	1Gb x72	1Gx4	2666MT/s	1.2V	-40°C to +85°C
ST11027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
SH1027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
SH1027RD410472SE	8GB	31.25	1Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
SH1027RD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST1027RD451872SE	8GB	31.25	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127RD451893SE	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
SH5127RD451872SE	4GB	31.25	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127RD451872HB	4GB	31.25	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C

### 288-PIN - DDR4 Mini-RDIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SH2047MR410872SC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SH1027MR451872SE	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
ST2047MR41D851SBU	16GB	17.78	2Gb x72	1Gx8	2133MT/s	1.2V	0°C to +70°C
SH1027MR410872SCU	8GB	17.78	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SH5127MR451872SEU	4GB	17.78	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C

DDR4

# DDR4 Ordering Information

288-PIN - DDR4 VLP RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SH4097RD420472SBV	32GB	18.75	4Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
SH2047RD410893SCV	16GB	18.75	2Gb x72	1Gx8	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
SHI2047RD420472SCV	16GB	18.75	2Gb x72	2Gx4	2400MT/s	1.2V	-40°C to +85°C
SH2047RD420472HCV	16GB	18.75	2Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
SH2047RD420472SCV	16GB	18.75	2Gb x72	2Gx4	2400MT/s	1.2V	0°C to +70°C
ST2047RD410872SCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI027RD410472HBV	8GB	18.75	1Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
SHI027RD410472SEV	8GB	18.75	1Gb x72	1Gx4	2400MT/s	1.2V	0°C to +70°C
SHI027RD410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI027RD451872SEV	8GB	18.75	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
SH5127RD451872SEV	4GB	18.75	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127RD451872HBV	4GB	18.75	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
260-PIN - DDR4 Non-ECC SODIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2046SO410893SC	16GB	30	2Gb x64	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI026SO410893SC	8GB	30	1Gb x64	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST5126SO451872SE	4GB	30	512Mb x64	512Mx8	2400MT/s	1.2V	0°C to +70°C
260-PIN - DDR4 ECC SODIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST2047SO410893SC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
SH2047SO410872SC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI2047SO410872SC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
ST2047SO410872HC	16GB	30	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI027SO410893HC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI027SO410893NA	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI027SO410893SC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI1027SO410893SC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
SHI027SO410872SC	8GB	30	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI027SO451872HB	8GB	30	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
SHI027SO451872SE	8GB	30	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
SHI1027SO451872SE	8GB	30	1Gb x72	512Mx8	2400MT/s	1.2V	-40°C to +85°C
STI027SO410872SC	8GB	30	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SH5127SO451872SE	4GB	30	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
SHI5127SO451872SE	4GB	30	512Mb x72	512Mx8	2400MT/s	1.2V	-40°C to +85°C
ST5127SO451872HB	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
ST5126UD451693SC	4GB	31.25	512Mb x64	512Mx16	2666MT/s	1.2V	0°C to +70°C
SH5126UD451872SE	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
SHI2047UD410872SC	16GB	31.25	2Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
SH2047UD410872SC	16GB	31.25	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SHI027UD451872SE	8GB	31.25	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
SH5127UD451872SE	4GB	31.25	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C

# DDR4 Ordering Information

288-PIN - DDR4 VLP Mini-UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
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
SH2047MU410872SCV	16GB	18.75	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°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
SH1027MU410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
SH1027MU451893SEV	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
SH1027MU451872SEV	8GB	18.75	1Gb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST1027MU410872HCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST1027MU410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
SH5127MU451893SEV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
SH5126MU451872SEV	4GB	18.75	512Mb x64	512Mx8	2400MT/s	1.2V	0°C to +70°C
SH5127MU451872SEV	4GB	18.75	512Mb x72	512Mx8	2400MT/s	1.2V	0°C to +70°C
ST5127MU451872HBV	4GB	18.75	512Mb x78	512Mx8	2400MT/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
SH1637LR420423-HM	128GB	31.25	16Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST8197LR420414-SC	64GB	31.25	8Gb x72	2Gx4	2933MT/s	1.2V	0°C to +70°C
SH8197LR420493-SC	64GB	31.25	8Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST4097LR420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	0°C to +70°C
ST2047LR410493SE	16GB	31.25	2Gb x72	1Gx4	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
SH1026MP41W672SB	8GB	22.25	1Gb x64	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST5126MP451693SC	4GB	22.25	512Mb x64	512Mx16	2666MT/s	1.2V	0°C to +70°C
STT5126MP451693ME	4GB	22.25	512Mb x64	512Mx16	2666MT/s	1.2V	-40°C to +85°C

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