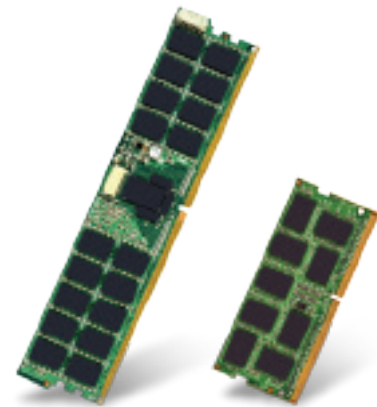




## DuraMemory™

# DDR4 Memory Modules

SMART Modular Technologies supports a complete lineup of DDR4 memory modules. These include VLP-DIMM, SO-DIMM, Mini-RDIMM, Mini-UDIMM, and LRDIMM. SMART Modular's DDR4 modules range from 32GB to 4GB, configured as x4 and x8 running GAT at DDR4-2400, DDR4-2666, DDR-2933, DDR4-3200 speed grades. SMART Modular 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 insure better reliability in systems
- Higher speeds starting at DDR4-2400

## 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
ST2047NJ420414HD	16GB	31.25	2Gb x72	2Gx4	2933MT/s	1.2V	0°C to +70°C
ST2047NJ420414SD	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
84-PIN - DDR4 DDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SR8197DE440425HA	64GB	64.55	8Gb x72	4Gx4	3200MT/s	1.2V	0°C to +70°C
SR4097DE420425HC	32GB	64.55	4Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C
SR2047DD420425HC	16GB	30.35	2Gb x72	2Gx4	3200MT/s	1.2V	0°C to +70°C

## Ordering Information

288-PIN - DDR4 RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
STT8197RD420825ME	64GB	31.75	8Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
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
ST8197RD420893MB	64GB	24.40	8Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
STT4097RD420825ME	32GB	31.25	4Gb x72	2Gx8	3200MT/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
STI4097RD420493SC	32GB	31.25	4Gb x72	2Gx4	2666MT/s	1.2V	-40°C to +85°C
ST2047RD410814SC	16GB	31.25	2Gb x72	1Gx8	2933MT/s	1.2V	0°C to +70°C
ST2047RD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI2047RD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°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
ST1027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI1027RD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST1027RD451893SF	8GB	31.25	1Gb x72	512Mx8	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
ST5127RD451893HB	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893MF	4GB	31.25	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127RD451893ND	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
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
ST1027MR451893SF	8GB	30	1Gb x72	512Mx8	2666MT/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
ST5127MR451893SFU	4GB	17.78	512Mb x72	512Mx8	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
ST4097MR44D825MBV	32GB	18.75	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
ST4097MR44D814MBV	32GB	18.75	4Gb x72	2Gx8	2933MT/s	1.2V	0°C to +70°C
ST4097MR44D814SAV	32GB	18.75	4Gb x72	2Gx8	2933MT/s	1.2V	0°C to +70°C
ST4097MR44D893SAV	32GB	18.75	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
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
ST1027MR410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST5127MR451893SEV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C

## Ordering Information

288-PIN - DDR4 VLP RDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST8197RD48D414MBV	64GB	18.75	8Gb x72	4Gx4	2933MT/s	1.2V	0°C to +70°C
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
ST2047RD420825SAV	16GB	18.75	2Gb x72	2Gx8	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
SH2047RD410893SBV	16GB	18.75	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°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
STI2047RD420493SCV	16GB	31.25	2Gb x72	2Gx4	2666MT/s	1.2V	-40°C to +85°C
ST1027RD410825SCV	8GB	18.75	1Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST1027RD410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027RD451893SFV	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
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
STI2046SO410893SC	16GB	30	2Gb x64	1Gx8	2666MT/s	1.2V	-40°C to +85°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
STI5126SO451893SF	4GB	30	512Mb x64	512Mx8	2666MT/s	1.2V	-40°C to +85°C
ST2566SO421693SF	2GB	30	256Mb x64	256Mx16	2666MT/s	1.2V	0°C to +70°C
ST2566SO421672SF	2GB	30	256Mb x64	256Mx16	2400MT/s	1.2V	0°C to +70°C

## Ordering Information

### 260-PIN - DDR4 ECC SODIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097SO420825SA	32GB	30	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STI4097SO420825SA	32GB	30	4Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
ST4097SO420814SA	32GB	30	4Gb x72	2Gx8	2933MT/s	1.2V	0°C to +70°C
STI4097SO420814SA	32GB	30	4Gb x72	2Gx8	2933MT/s	1.2V	-40°C to +85°C
ST4097SO420893SA	32GB	30	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
STB4097SO420893SA	32GB	30	4Gb x72	2Gx8	2666MT/s	1.2V	-25°C to +85°C
STI4097SO420893SA	32GB	30	4Gb x72	2Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2047SO410825SC	16GB	30	2Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047SO420825SA	16GB	30	2Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STI2047SO410825SC	16GB	30	2Gb x72	1Gx8	3200MT/s	1.2V	-40°C to +85°C
ST2047SO410814SC	16GB	30	2Gb x72	1Gx8	2933MT/s	1.2V	0°C to +70°C
STI2047SO410814SC	16GB	30	2Gb x72	1Gx8	2933MT/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
ST2047SO410893SC1	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI2047SO410893SC	16GB	30	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST1027SO410825SC	8GB	30	1Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST1027SO410814SC	8GB	30	1Gb x72	1Gx8	2933MT/s	1.2V	0°C to +70°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
STI1027SO410893SC	8GB	30	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
STI1027SO451893SF	8GB	30	1Gb x72	512Mx8	2666MT/s	1.2V	-40°C to +85°C
ST5127SO451893SF	4GB	30	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
STI5127SO451893SF	4GB	30	512Mb x72	512Mx8	2666MT/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
ST2046UD420825SA	16GB	31.25	2Gb x64	2Gx8	3200MT/s	1.2V	0°C to +70°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
STI5126UD451893SF	4GB	31.25	512Mb x64	512Mx8	2666MT/s	1.2V	-40°C to +85°C

### 288-PIN - DDR4 ECC UDIMM

SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097UD420825SA	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
STI4097UD420825SA	32GB	31.25	4Gb x72	2Gx8	3200MT/s	1.2V	-40°C to +85°C
ST2047UD410825SC	16GB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	0°C to +70°C
ST2047UD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI2047UD410893SC	16GB	31.25	2Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST2047UD410872NC	16GB	31.25	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST2047UD410872SC	16GB	31.25	2Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
ST1027UD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
STI1027UD410893SC	8GB	31.25	1Gb x72	1Gx8	2666MT/s	1.2V	-40°C to +85°C
ST1027UD451893SF	8GB	31.25	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST1027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI1027UD410872SC	8GB	31.25	1Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°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
STI2047UD410825SC	128MB	31.25	2Gb x72	1Gx8	3200MT/s	1.2V	-40°C to +85°C

## Ordering Information

288-PIN - DDR4 ECC ULP UDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
ST4097UD420825HAU	32GB	17.78	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
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
STI4097UD420893SAU	32GB	17.78	4Gb x72	2Gx8	2666MT/s	1.2V	-40°C to +85°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
ST4097MU44D814SAU	32GB	17.78	4Gb x72	2Gx8	2933MT/s	1.2V	0°C to +70°C
ST4097MU44D893SAU	32GB	17.78	4Gb x72	2Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027MU410893SCU	8GB	17.78	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027MU410872SCU	8GB	17.78	1Gb x72	1Gx8	2400MT/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
ST4097MU44D825SAV	32GB	18.75	4Gb x72	2Gx8	3200MT/s	1.2V	0°C to +70°C
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
ST2047MU420893SAV	16GB	18.75	2Gb x72	2Gx8	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
ST1027MU410893HCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027MU410893SCV	8GB	18.75	1Gb x72	1Gx8	2666MT/s	1.2V	0°C to +70°C
ST1027MU451893SFV	8GB	18.75	1Gb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST1027MU410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	0°C to +70°C
STI1027MU410872SCV	8GB	18.75	1Gb x72	1Gx8	2400MT/s	1.2V	-40°C to +85°C
ST5126MU451893SFV	4GB	18.75	512Mb x64	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127MU451893HBV	4GB	18.75	512Mb x72	512Mx8	2666MT/s	1.2V	0°C to +70°C
ST5127MU451893SFV	4GB	18.75	512Mb x72	512Mx8	2666MT/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
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
ST2046MP42W625SA	16GB	22.25	2Gb x64	1Gx16	3200MT/s	1.2V	0°C to +70°C
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
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
ST2566MP421693ND	2GB	22.25	256Mb x64	256Mx16	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



For more information, please visit: [www.smartm.com](http://www.smartm.com)

### Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231  
F: (+1) 510-623-1434 • E: [info@smartm.com](mailto:info@smartm.com)

### Latin America:

T: (+55) 11 4417-7200 • E: [sales.br@smartm.com](mailto:sales.br@smartm.com)

### Asia/Pacific:

T: (+65) 6678-7670 • E: [sales.asia@smartm.com](mailto:sales.asia@smartm.com)

### EMEA:

T: (+44) 0 7826-064-745 • E: [sales.euro@smartm.com](mailto:sales.euro@smartm.com)

### Customer Service:

T: (+1) 510-623-1231 • E: [customers@smartm.com](mailto:customers@smartm.com)