

# DDR4 & DDR3 LRDIMMs

## DDR4 & DDR3 LRDIMMs

SMART Modular Technologies' DDR3 and DDR4 load-reduced dual in-line memory modules (LRDIMMs) use a distributed buffer approach so that high-speed memory controllers in CPUs can drive larger quantities of memory. There are also specific configurations, such as when using three DIMMs per channel, that require LRDIMMs.

SMART supports a wide lineup of DDR4 LRDIMMs ranging from 16GB to 128GB. The current speed grades supported are DDR4-2133 and DDR4-2400. For OEMs requiring a range of LRDIMM density options, as low as 16GB for example, SMART can provide a smooth continuity of supply. SMART helps minimize supply chain disruptions by self-qualifying new die revs and providing multi-sourced DRAM options.

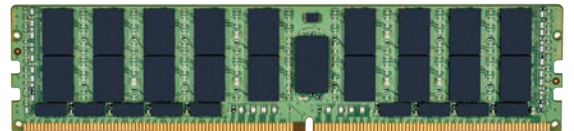
For OEMs with mission-critical requirements SMART offers Enterprise Grade LRDIMMs to significantly minimize the risk of DRAM failures in deployed systems.

SMART also offers a selection of value memory modules in its LRDIMM series. Value Memory modules are cost-effective Tier 1 ODM JEDEC-standard memory modules. SMART buys its finished lineup of commodity memory modules directly from Tier 1 DRAM suppliers. These are the most commonly used modules for standard server computing and storage applications..

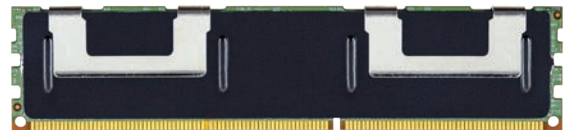
### Features & Benefits

- JEDEC standard
- High speed data rates
  - DDR4-2133 & DDR4-2400
  - DDR3-1600 & DDR3-1866
- Wide product lineup
  - DDR4 16GB to 128GB
  - DDR3 32GB & 64GB

### DDR4 LRDIMM



### DDR3 LRDIMM



### Applications

- Ideal for data centers requiring large amounts of server memory
- Ideal for three DIMM per channel server configurations
- Enterprise Grade LRDIMMs available for mission critical applications

## DDR4 Memory Modules

288-PIN - DDR4 LRDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SH1637LR420402-SB	128GB	31.25	16G x72	2G x4	2400 MT/s	1.2V	0°C to +70°C
SH8197LR420472-SB	64GB	31.25	8G x72	2G x4	2400 MT/s	1.2V	0°C to +70°C
SH8197LR420472-HM	64GB	31.25	8G x72	2G x4	2400 MT/s	1.2V	0°C to +70°C
SH4097LR420472-SB	32GB	31.25	4G x72	2G x4	2400 MT/s	1.2V	0°C to +70°C
SH4097LR420451SB	32GB	31.25	4G x72	2G x4	2133 MT/s	1.2V	0°C to +70°C
SH4097LR410472-HA	32GB	31.25	4G x72	1G x4	2400 MT/s	1.2V	0°C to +70°C
SH2047LR410451SE	16GB	31.25	2G x72	1G x4	2133 MT/s	1.2V	0°C to +70°C

## DDR3 Memory Modules

240-PIN - DDR3 LRDIMM							
SMART Part Number	Density	Height (mm)	Module Config	Device Config	Speed	Voltage	Temp
SH8197LR310416-SD	64GB	30.00	8G x72	1G x4	1600 MT/s	1.5V	0°C to +70°C
SH4097LR310438-HD	32GB	30.00	4G x72	1G x4	1866 MT/s	1.5V	0°C to +70°C

**VM** \*The modules noted above are Value Memory parts. For DDR4 LRDIMM Value Memory, please visit [smartm.com/DDR4valuememory](http://smartm.com/DDR4valuememory).  
For DDR3 LRDIMM Value Memory, visit [smartm.com/DDR3valuememory](http://smartm.com/DDR3valuememory)

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