



## **SODIMM DDR4**

### **Description**

This document describes S3+ 512M x 64-bit (4GB) DDR4-2400 CL17 SDRAM (Synchronous DRAM), 1Rx8, non-ECC, memory module, based on eight 512M x 8-bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4- 2400 timing of 17-17-17 at 1.2V. This 260-pin DIMM uses gold contact fingers. The electrical and mechanical specifications are as follows:

### **Features**

Power Supply: VDD = 1.2V Typical

VDDQ = 1.2V Typical

VPP = 2.5V Typical

VDDSPD = 2.5V Typical

Nominal and dynamic on-die termination (ODT) for data, strobe, and mask signals

Low-power auto self refresh (LPASR)

Data bus inversion (DBI) for data bus

On-die VREFDQ generation and calibration

Single-rank

On-board I2 serial presence-detect (SPD) EEPROM

8 internal banks; 2 groups of 4 banks each

Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the mode register set (MRS)

Selectable BC4 or BL8 on-the-fly (OTF)

Fly-by topology

Terminated control command and address bus

PCB: Height 1.18" (30.00mm)

RoHS Compliant and Halogen-Free

### **Specifications**

CL (IDD) 17 cycles

Row Cycle Time (tRCmin) 61.13ns(min.)

Refresh to Active/Refresh Command Time (tRFCmin) 260ns(min.)

Row Active Time (tRASmin) 29,13ns(min.)

Maximum Operating Power TBD W\*

UL Rating 94 V-0

Operating Temperature 0° C to +85° C

Storage Temperature -55°C to +100°C

\*Power will vary depending on the SDRAM used.