



MEMORY DIMM DDR4

Description

This document describes S3+ is a 512M x 64bit (8GB) DDR4 2400 CL17 SDRAM (Synchronous DRAM), 2Rx8, memory module, based on sixteen 512M x 16 bit FBGA components. The SPD is programmed to JEDEC standard latency DDR4 2400 timing of 17-17-17 at 1.2V. Each 288-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

16 internal banks; 4 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 1.23" (31.25mm)

RoHS Compliant and Halogen-Free

Specifications

CL (IDD) 17 cycles

Row Cycle Time (tRCmin) 33 ns(min.)

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

Row Active Time (tRASmin) 33ns(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