CIR-S4SUSA3232G

DDR4 SO-DIMM 3200MHz 32GB

Description

This specification defines the electrical and mechanical requirements for 260 pin, 1.2 V (VDD), Double Data Rate, Synchronous DRAM Dual In-Line Memory Modules (DDR4 SDRAM SO-DIMM). This DDR4 SO-DIMM is intended for use as main memory when installed in PCs, laptops and other systems.

Reference design examples are included which provide an initial basis for DDR4 SO-DIMM designs. Modifications to these reference designs may be required to meet all system timing, signal integrity and thermal requirements for DDR4-3200 support. All DDR4 SO-DIMM implementations must use simulations and lab verification to ensure proper timing requirement and signal integrity in the design.

Specifications

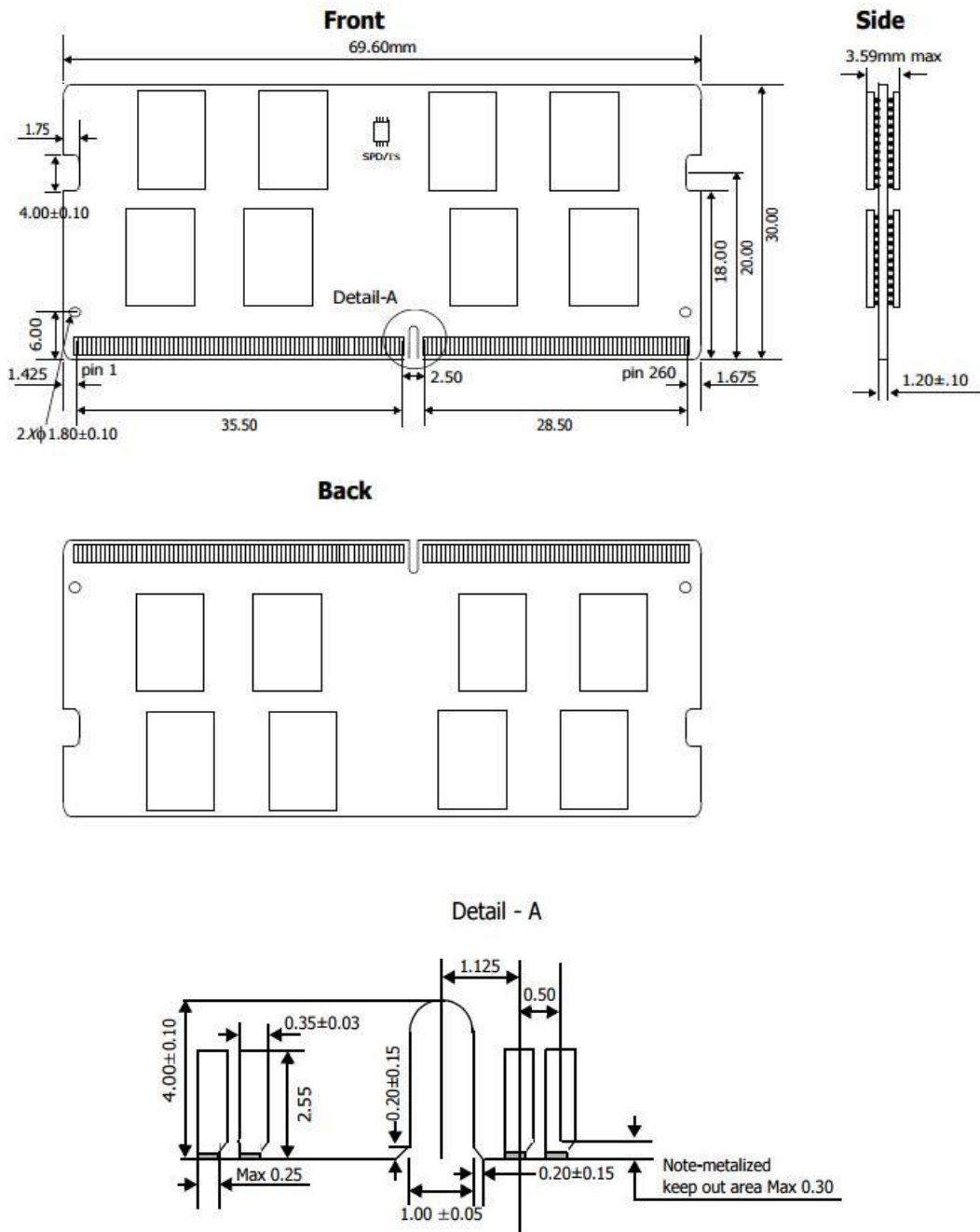|	
Density	32GB
Pin Count	260pin
Type	Unbuffered
Dimensions	69.60mm x 30.00mm
ECC	Non-ECC
Component Config	2G x 8 bit
Data Rate	3200 MHz
CAS Latency	22
Voltage	1.2V
PCB Layers	10
Operating Temp.(TCASE)	0°C~+85°C
Module Ranks	Dual Rank

Features

- JEDEC Standard 260-pin Dual In-Line Memory Module
- Intend for PC4-3200 applications
- Inputs and Outputs are SSTL-12 compatible
- VDD=VDDQ = 1.2V±0.06V   (1.14V~1.26V)
- Programmable CAS Latency(posted CAS): 11,12,13,14,15,16,17,18,19,20,21,22
- Low-Power auto self-refresh (LPASR)
- SDRAMs have 16 internal banks for concurrent operation (4 Bank Group of 4 banks each)
- Normal and Dynamic On-Die Termination for data, strobe and mask signals
- Data bus inversion (DBI) for data bus
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the MRS
- Selectable BC4 or BL8 on-the fly (OTF)
- Fly-By topology
- Terminated control, command and address bus
- RoHS and Halogen free

Speed Grade

Frequency Grade	Data Transfer Rate	CAS Latency Support												CL-tRCD-tRP
		CL11	CL12	CL13	CL14	CL15	CL16	CL17	CL18	CL19	CL20	CL21	CL22	
DDR4-3200	PC4-25600	1600	1600	1866	1866	2133	2133	2400	2400	2666	2666	2933	3200	22-22-22

Package Dimensions

Unit: mm

Front
69.60mm

Side
3.59mm max

1.75
4.00±0.10
6.00
1.425
pin 1
2.50
pin 260
1.675
18.00
20.00
30.00
2 X φ1.80±0.10
35.50
28.50
1.20±.10

Detail-A

Back

Detail - A

1.125
0.50
4.00±0.10
0.35±0.03
2.55
-0.20±0.15
Max 0.25
1.00 ±0.05
0.20±0.15
Note-metalized keep out area Max 0.30

Tolerances : ± 0.15mm unless otherwise specified