

RoHS Compliant

32GB ECC DDR5 SDRAM SO-DIMM

Halogen free

Product Specifications

June 28, 2023

Version 1.1



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General Description

Apacer **D42.35301H.001** is a 32GB DDR5 SDRAM (Synchronous DRAM) SO-DIMM. This memory module consists of 20 pieces 2G x 8 bits DDR5 synchronous DRAMs in FBGA packages and 8K Bits EEPROM. The module is a 262-pins dual in-line memory module and is intended for mounting into a connector socket. The following provides general specifications of this module.

Ordering Information

Part Number	Density	Speed	Organization	DRAM Composition	Rank
D42.35301H.001	32GB	5600 Mbps	4Gx72	2Gx8 *20	2

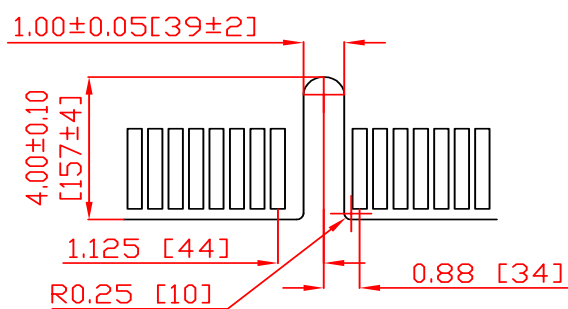
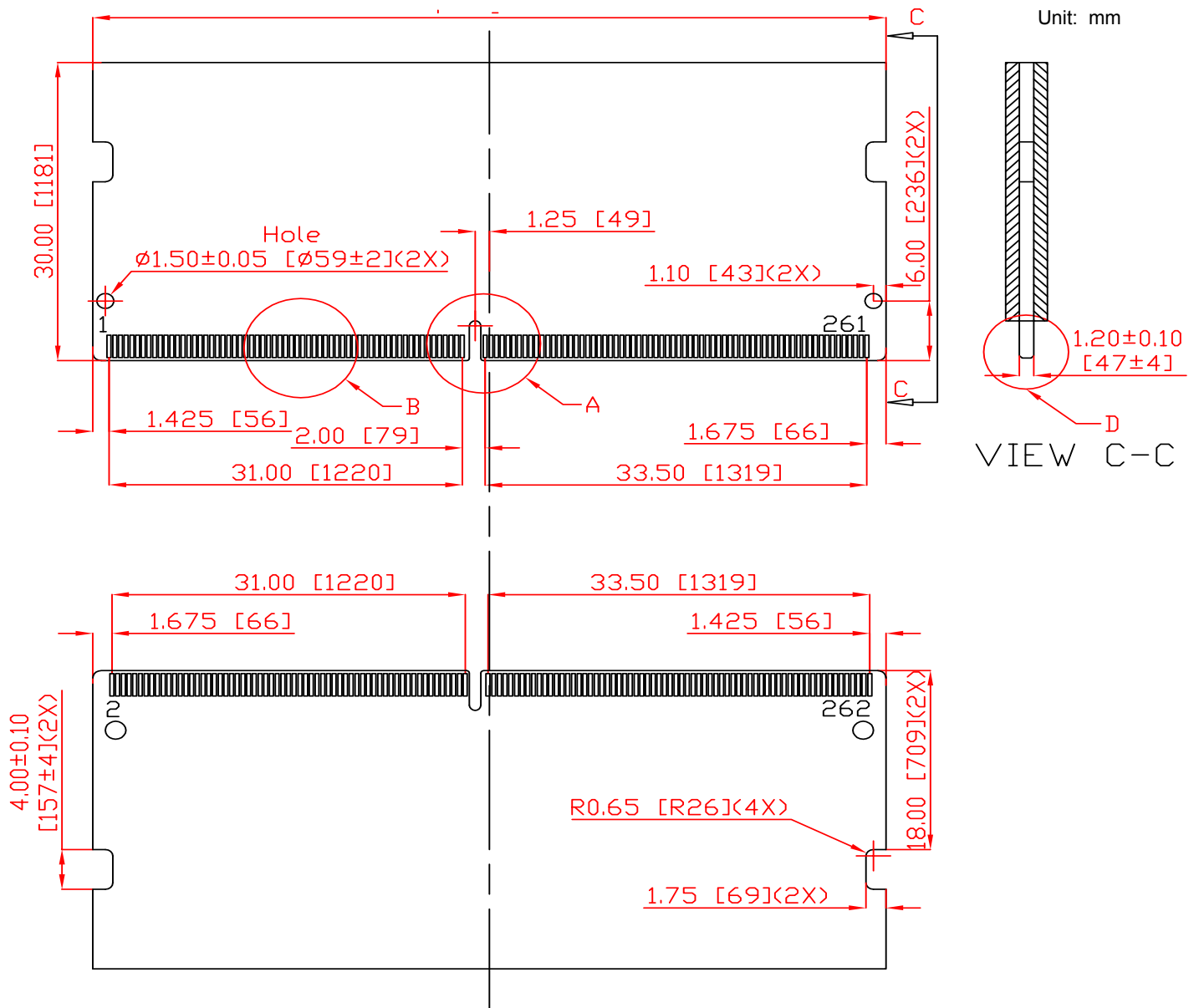
Key Parameters

Speed	DDR5-4800	DDR5-5600	Unit
	-CL40	-CL46	
tCK (min)	0.416	0.357	ns
CAS latency	40	46	nCK
tRCD (min)	16	16	ns
tRP (min)	16	16	ns
tRAS (min)	32	32	ns
tRC (min)	48	48	ns
CL-tRCD-tRP	40-39-39	46-45-45	nCK

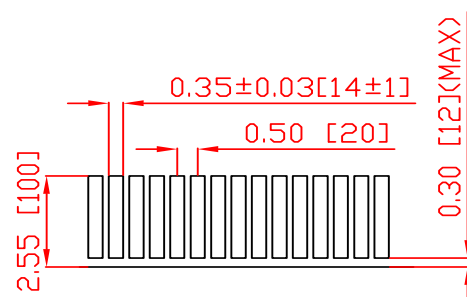
Features:

- ◆ JEDEC standard compliant
- ◆ Support ECC error detection and correction
- ◆ On-DIMM thermal sensor : Yes
- ◆ PCB: height 30 mm, lead pitch 0.5 mm (pin),
- ◆ VDD = VDDQ= 1.1V (1.067V to 1.166V)
- ◆ VPP = 1.8V (1.746V to 1.908V) 、 VDDSPD = 1.8V
- ◆ 32 internal banks (x4, x8): 8 groups of 4 banks each
- ◆ 16 internal banks (x16): 4 groups of 4 banks each
- ◆ CAS Latency (CL): 22,26,28,30,32,36,40,42,46,48,50
- ◆ CAS Write Latency (CWL): RL-2
- ◆ Operating temperature Tcase—(0°C~85°C)
- ◆ Average Refresh period 3.9us at lower than Tcase 85°C, 1.95us at 85°C < Tcase < 95 °C.
- ◆ All bank and same bank refresh
- ◆ Bi-Directional Differential Data Strobe
- ◆ 16-bit prefetch architecture
- ◆ On-die ECC
- ◆ ECC transparency and error scrub
- ◆ sPPR and hPPR capability
- ◆ Halogen free 、 Lead-free (RoHS compliant)
- ◆ PCB: 30μ inch gold finger

Mechanical Drawing



Detail A



Detail B

30 μ inch gold finger

(All dimensions are in millimeters with ± 0.15 mm tolerance unless specified otherwise.)

Revision History

Revision	Date	Description	Remark
1.0	4/12/2022	Initial release	
1.1	11/4/2022	Updated DIMM Voltage Requirements	

Global Presence

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