

RoHS Compliant

16GB DDR5 SDRAM SO-DIMM

Halogen free

Product Specifications

March 31, 2023

Version 1.1



Apacer Technology Inc.

1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236, Taiwan

Tel: +886-2-2267-8000

Fax: +886-2-2267-2261

www.apacer.com

General Description

Apacer **D22.35284H.001** is a 16GB DDR5 SDRAM (Synchronous DRAM) SO-DIMM. This memory module consists of 8 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
D22.35284H.001	16GB	5600 Mbps	2Gx64	2Gx8 *8	1

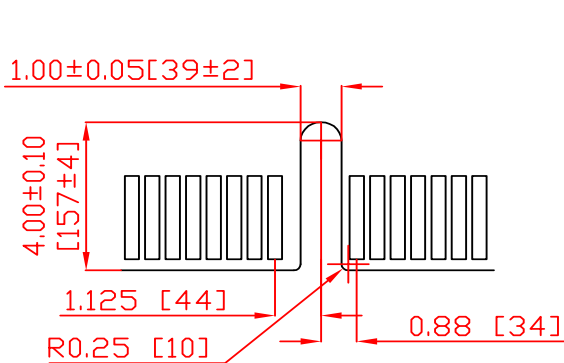
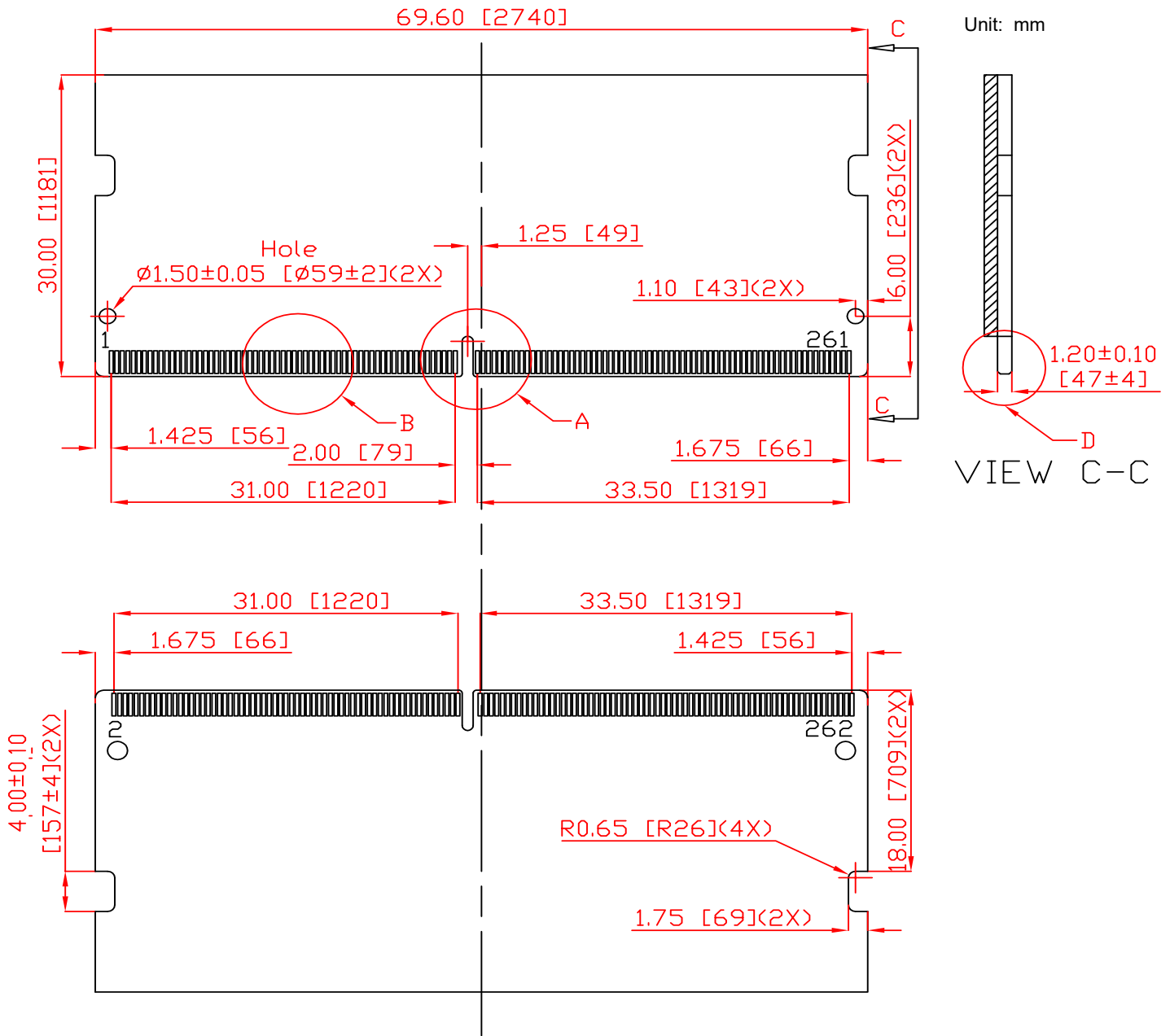
Key Parameters

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

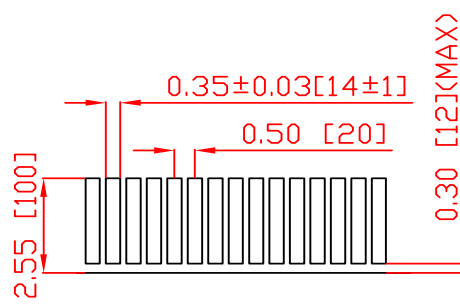
Features:

- ◆ JEDEC standard compliant
- ◆ 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)

Mechanical Drawing



Detail A



Detail B

(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

Taiwan (Headquarters)

Apacer Technology Inc.

1F., No.32, Zhongcheng Rd., Tucheng Dist.,
New Taipei City 236, Taiwan R.O.C.

Tel: +886-2-2267-8000

Fax: +886-2-2267-2261

amtsales@apacer.com

U.S.A.

Apacer Memory America, Inc.

46732 Lakeview Blvd., Fremont, CA 94538

Tel: 1-408-518-8699

Fax: 1-510-249-9568

sa@apacerus.com

Japan

Apacer Technology Corp.

5F, Matsura Bldg., Shiba, Minato-Ku

Tokyo, 105-0014, Japan

Tel: 81-3-5419-2668

Fax: 81-3-5419-0018

jpservices@apacer.com

Europe

Apacer Technology B.V.

Science Park Eindhoven 5051 5692 EB Son,
The Netherlands

Tel: 31-40-267-0000

Fax: 31-40-290-0686

sales@apacer.nl

China

Apacer Electronic (Shanghai) Co., Ltd.

Room D, 22/FL, No.2, Lane 600, Jieyun Plaza,

Tianshan RD, Shanghai, 200051, China

Tel: 86-21-6228-9939

Fax: 86-21-6228-9936

sales@apacer.com.cn

India

Apacer Technologies Pvt Ltd.

1874, South End C Cross, 9th Block Jayanagar,

Bangalore-560069, INDIA.

Tel: 91-80-4152-9061/62

Fax: 91-80-4170-0215

sales_india@apacer.com