

RoHS Compliant

16GB DDR5 SDRAM SO-DIMM

Halogen free

Product Specifications

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Version 1.0



Apacer Technology Inc.

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General Description

Apacer **D22.31284S.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
D22.31284S.001	16GB	4800 Mbps	2Gx64	2Gx8 *8	1

Key Parameters

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

Global Presence

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