

SOSAM DDR5 UDIMM 16GB 5600

Datasheet Ver1.0

I.Product Basic Information

- Memory Type: PC5-44800 DDR5 SDRAM 288pins UDIMM
- Memory Model: DDR5-5600 VDD-1.1V
- Memory Capacity: 16GB
- IC Model: DDR5-2Gbx8

II.Technical Specifications

2.1 Memory Parameters

Item	Value
Part Number	KMD5U16GD1M556DC
Work CL	CL=46, 46-46-46-90
Capacity	16GB
IC Model	D8DKS
IC Organization	2Gbx8
IC Quantity	8
Voltage	VDD=1.1V/VDDQ=1.1V/VPP=1.8V
PMIC Model	RICHTEK-RTQ5136
SPD Model	TD-SPD5188
SPD	Yes
XMP	No
PCB Model	KO-8824A-5 or B85URCA

2.2 Environmental Requirements

Item	Value
Operating Temperature	Commercial ($0^{\circ}\text{C} \leq \text{TOPER} \leq 95^{\circ}\text{C}$)
Operating Humidity	Relative Humidity: 10% – 90%
Storage Temperature	-50°C – 100°C
Storage Humidity	Relative Humidity: 5% – 95%
Working Storage Pressure	69 – 105 kPa

2.3 SPD Description

SPD Must Meet JEDEC DDR5 standard.

2.4 PCB Performance Parameters

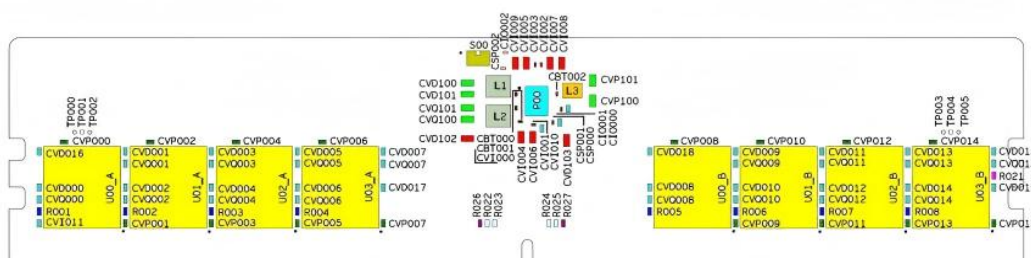
Item	Value
Material	FR-4
Rewind Thickness	1.27±0.1mm
Nickel & Gold Plating Thickness :	Au: 2-3u/Ni: 120-140u
Line width	0.075mm
Line Distance	0.1mm
Warp & Twist	<0.75%
Solderability Test	IPC-TM650
Solder Mask	Black, thickness ≥ 15 μm
Size	133.35*31.25±0.1mm
Impedance	Single-ended 40/55 Ω±10%
	Differential 54/70 Ω±15%
Layer	8

2.5 Label Description

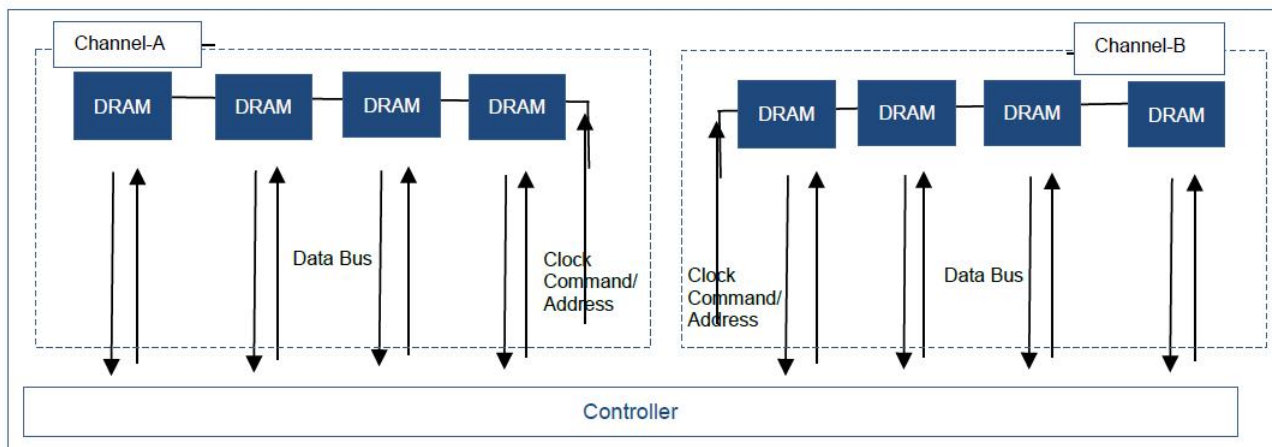
Label Type	Specification
PCB Board Label	PCB model printed on the board.
Memory Module Label	Includes memory capacity, frequency, and serial number.

III.Memory Parts location diagram

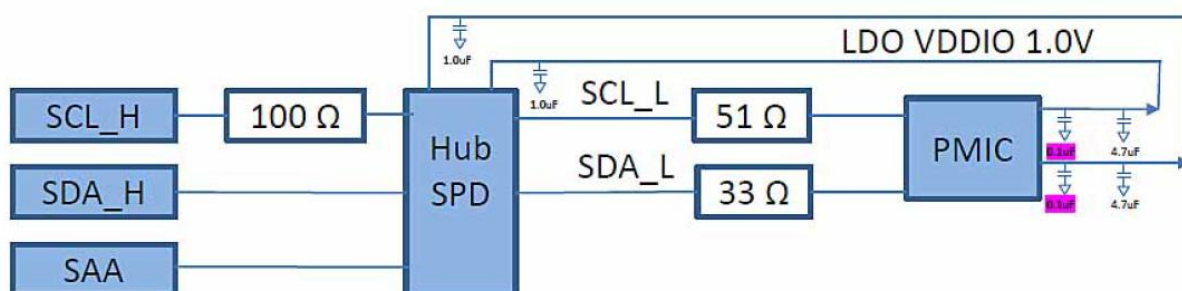
Front-side components diagram



IV.Memory Functional Block Diagram



I2C/I3C - Sideband/SMBUS Topology



Technical drawing of a rectangular component, showing front and back views, and a detail view.

Front View (FRONT COMP SIDE):

- Overall width: 133.35
- Overall height: 31.25
- Top edge features: 16.1 (left), 9.5 (center), 17.6 (right)
- Bottom edge features: 3.35 (left), 3.55 (center), 5.95 (right)
- Internal dimensions: 129.55 (width), 5.575 (height), 11.8 (height), 8.8 (height)
- Central feature: Detail A (a circular hole)
- Material/Process: Ø0.85*76=64.6 (left), Ø0.85*66=56.1 (right)

Back View (BACK COMP SIDE):

- Overall width: 133.35
- Overall height: 31.25
- Top edge features: 32.675 (left), 9.35 (center), 55.25 (right)
- Bottom edge features: 0.5 (left), 1.5 (center), 0.5 (right)
- Internal dimensions: 71.5 (width), 60.35 (width)

Detail A:

- Overall width: 4.3
- Overall height: 3.8
- Top edge features: 1.65 (left), R0.75mm (right)
- Bottom edge features: 1.5 (center)
- Internal dimensions: 0.6 (width), 0.2 (height)

Material/Process: T = 1.4 mm

TOLERANCE: ± 0.1mm

UNIT: mm 03/18/14

For More Information

For Technical Support:

If additional support is needed, please visit the SOSAM Web site at www.kumi2020.com

for the following topics:

- **Warranty Services:** Includes the warranty service policy and the RMA requestforms.
- **Technical Information:** Includes product data sheets and various USB whitepapers.
- **Tools Section:** Includes frequently asked questions (FAQs).