

# **SOSAM DDR4 UDIMM 16GB 3200**

## **Datasheet Ver1.0**

# I.Product Basic Information

- Memory Type: PC4-25600 DDR4 SDRAM 288-pin UDIMM
- Memory Model: DDR4-PC-3200
- Memory Capacity: 16GB
- IC Model: DDR4-2Gb x8

## II.Technical Specifications

### 2.1 Memory Parameters

| Item               | Specification      |
|--------------------|--------------------|
| Part Number        | KMD4U16GC1S332DC   |
| Operating Timing   | CL=22, 22-22-22-52 |
| Memory Capacity    | 16GB               |
| Chip Model         | DDR4-2Gb*8         |
| Chip Configuration | 2Gb*8*2die         |
| Number of Chips    | 8                  |
| Operating Voltage  | 1.2V               |
| SPD                | Yes                |
| XMP                | No                 |
| PCB Model          | K48UD-V            |

### 2.2 Environmental Requirements

| Item                             | Specification                |
|----------------------------------|------------------------------|
| Operating Temperature            | 0 - 85 °C                    |
| Operating Humidity               | Relative Humidity: 10% - 90% |
| Storage Temperature              | -50 - 100 °C                 |
| Storage Humidity                 | Relative Humidity: 5% - 95%  |
| Operating & Storage Air Pressure | 69 - 105 KPa                 |

## 2.3 SPD Description

SPD must comply with the requirements of JEDEC DDR4 standard.

## 2.4 PCB Board Performance Parameters

| Item                        | Specification                   |
|-----------------------------|---------------------------------|
| PCB Material                | FR-4                            |
| Finished Board Thickness    | 1.40±0.1 mm                     |
| Ni/Au Plating Thickness     | Au: 2 – 3 μm; Ni: 120 – 140 μm; |
| Trace Width                 | 0.075 mm                        |
| Trace Spacing               | 0.1 mm                          |
| Board Warpage & Twist       | <0.75%                          |
| Solderability Test Standard | IPC-TM650                       |
| Solder Mask                 | Black, thickness ≥ 15 μm        |
| Module Outline Dimension    | 133.35*31.24±0.15 mm            |
| Impedance                   | Single-ended: 40/50/55 Ω±10%    |
|                             | Differential: 70/83/93 Ω±15%    |
| Number of Layers            | 8 Layers                        |

## 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.DRAM Chip Electrical Parameters

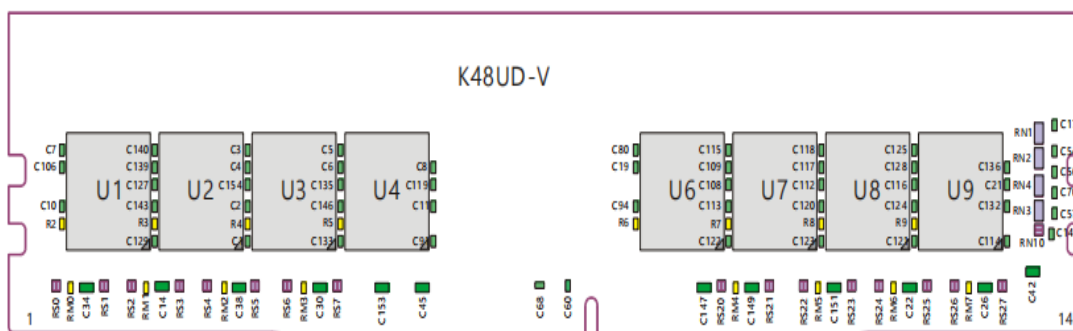
Electrical parameters shall comply with the SSTL-1.2 Class II standard.

Supply Voltage and DC Parameters are listed below.

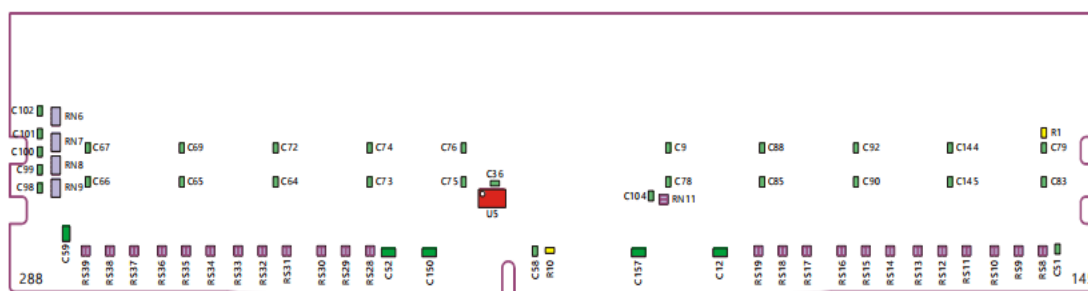
| Parameter                              | Minimum Value (V) | Maximum Value (V) |
|----------------------------------------|-------------------|-------------------|
| VDD (Supply Voltage)                   | 1.14              | 1.26              |
| VDDQ (I/O Supply Voltage)              | 1.14              | 1.26              |
| VREF (I/O Reference Voltage)           | 0.49*VDD          | 0.51*VDD          |
| VTT (I/O Termination Voltage (System)) | VREF-0.04         | VREF+0.04         |

## IV.Memory Component Location Diagram

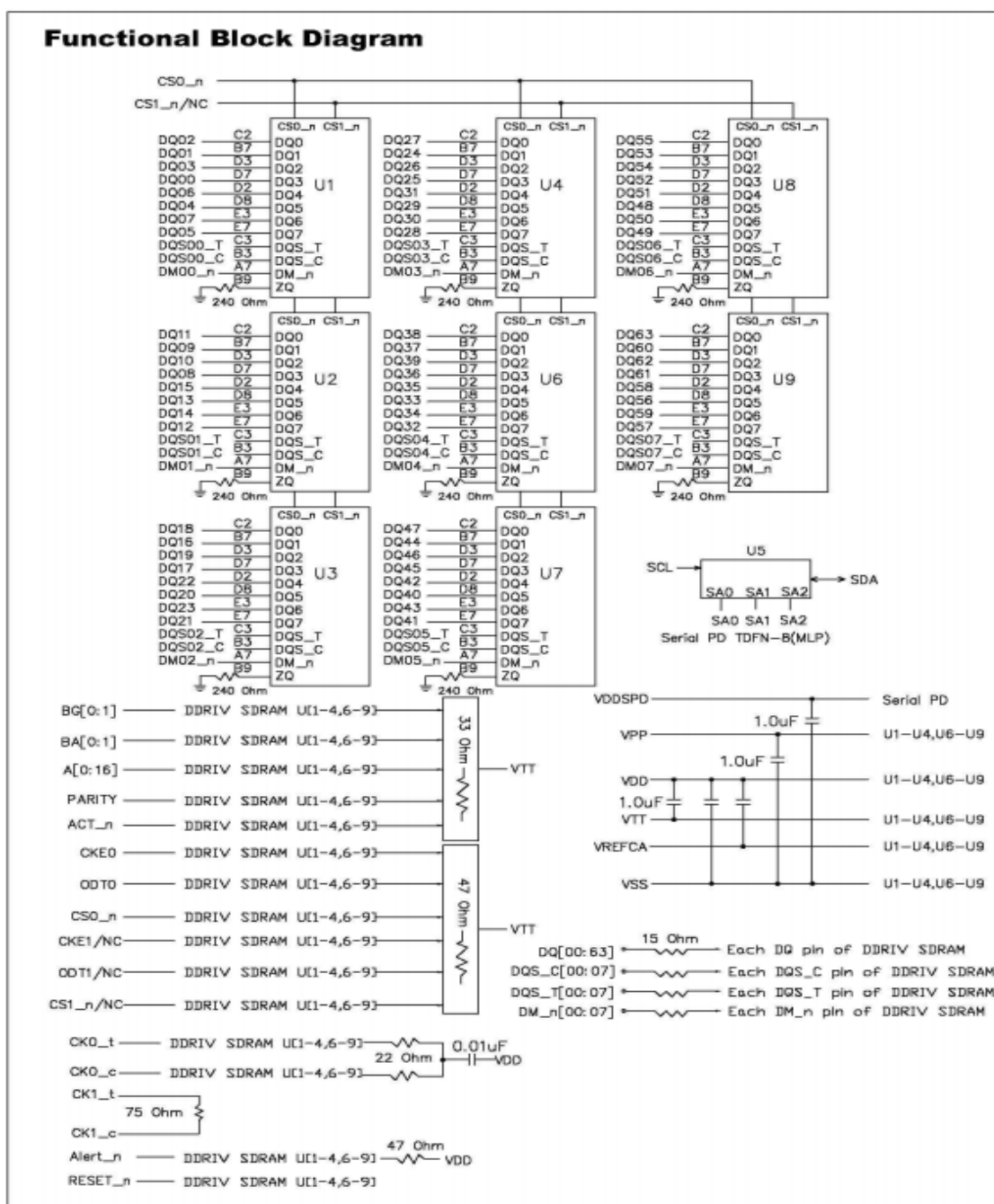
Front-side components diagram



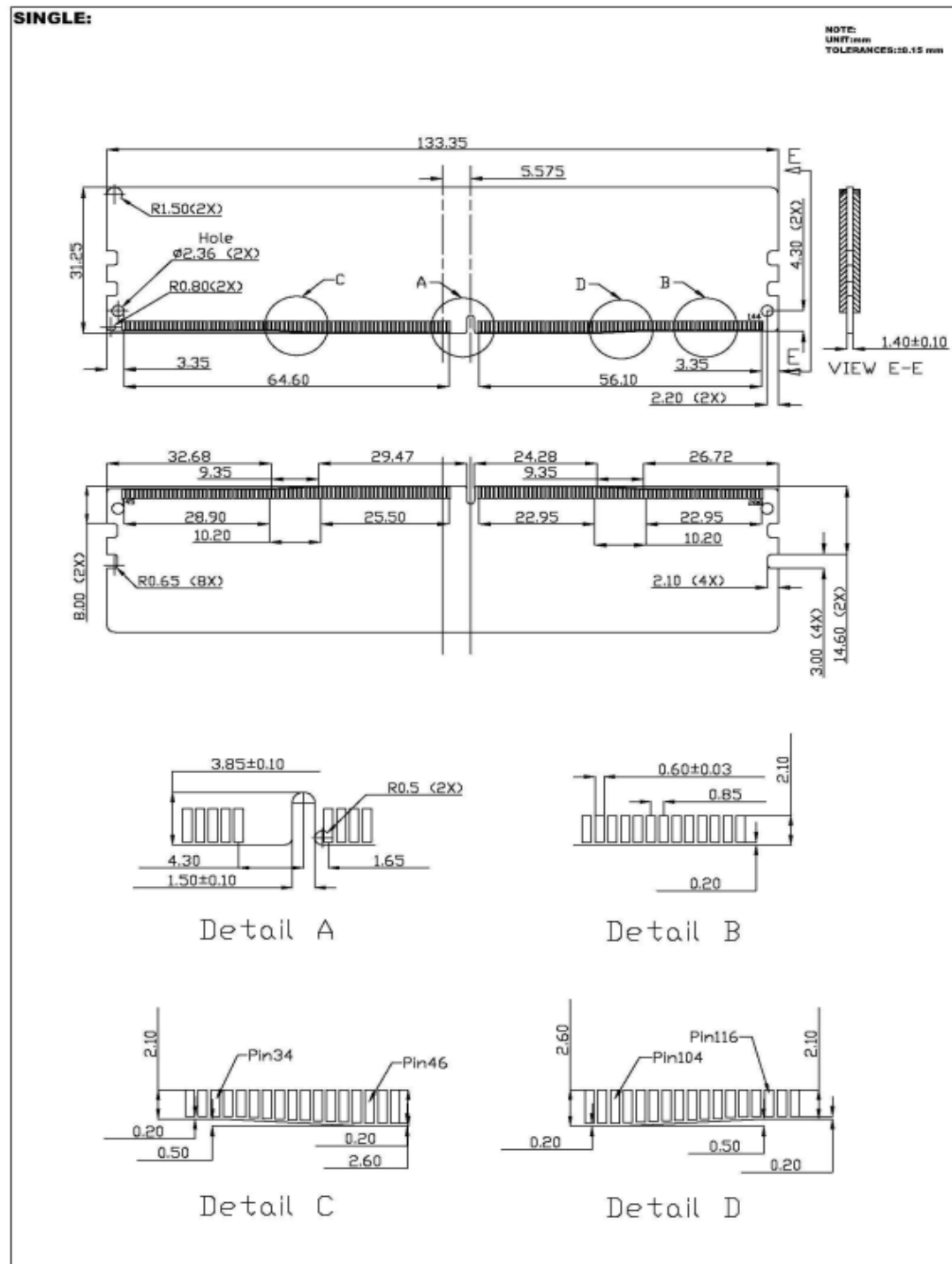
Back-side Components Diagram



# V.Memory Functional Block Diagram



# VI.PCB Outline Dimension Drawing



## For More Information

For Technical Support:

If additional support is needed, please visit the SOSAM Web site at [www.kumi2020.com](http://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).