

Embedded Solutions

DRAM Modules DDR5



Transcend's DDR5 DRAM modules operate at a nominal voltage of only 1.1V, offering higher energy efficiency and exceptional clock speeds to cater to the demands of the embedded industry. Power management integrated circuits (PMIC) provides better signal integrity and more stable power. All components are of the highest quality, having been sourced directly from the world's first-tier supplier of DRAM chips and stringently tested for unparalleled compatibility, reliability, and performance.

Features

- 1.1V low power supply
- Power management IC (PMIC), high energy efficiency
- On-die ECC
- Burst Length: 16, 32
- 16 bit pre-fetch
- Multi-Purpose Command (MPC)
- Decision Feedback Equalization (DFE)
- SPD Hub with Thermal Sensor
- 100% tested for stability, compatibility and performance
- Limited Lifetime Warranty

Advanced Technologies



Anti-Sulfur
Technology



30 µm
Gold Finger

DDR5 DIMMs



| | | |
|---------------------------|--|--------------|
| Module Type | DDR5 Long-DIMM | DDR5 SO-DIMM |
| Standard | JEDEC® | |
| Speed | 6400/5600/4800MT/s | |
| Capacity | 8GB~48GB | |
| Voltage | 1.1V | |
| Pin Count | 288 pin | 262 pin |
| PCB Height | 1.23 inches | 1.18 inches |
| PCB Gold Finger Thickness | 30μ" (ECC & Registered) | |
| Anti-Sulfuration | Default (ECC & Registered) | |
| Operating Temperature | Standard Temperature: 0°C ~ 95°C Extended Temperature: -20°C ~ 95°C Wide Temperature: -40°C ~ 95°C | |

Ordering Information

DDR5-6400 Unbuffered DIMM

| Standard Temp. (0°C~85°C) | Capacity | Component Composition | Rank x Org. | CU-DIMM | CSO-DIMM |
|------------------------------|-----------|-----------------------|--------------|--------------|--------------|
| | 16GB | (2Gx8)x8 | 1Rx8 | TS2GLA64V4E3 | TS2GSA64V4E3 |
| 32GB | (2Gx8)x16 | 2Rx8 | TS4GLA64V4E3 | TS4GSA64V4E3 | |

DDR5-5600 Unbuffered DIMM

| Standard Temp. (0°C~95°C) | Capacity | Component Composition | Rank x Org. | Long-DIMM | SO-DIMM |
|---------------------------------|----------|-----------------------|-------------|---------------|----------------|
| | | (2Gx8)x8 | 1Rx8 | TS5600ALE-16G | TS5600ASE-16G |
| Standard Temp. (0°C~95°C) | 16GB | (2Gx8)x8 | 1Rx8 | TS2GLA64V6E1 | TS2GSA64V6E1 |
| | | (2Gx8)x16 | 2Rx8 | TS5600ALE-32G | TS5600ASE-32G |
| | 32GB | (2Gx8)x16 | 2Rx8 | TS4GLA64V6E1 | TS4GSA64V6E1 |
| | | (3Gx8)x16 | 2Rx8 | TS6GLA64V6E3 | TS6GSA64V6E3 |
| Extended Temp. (-20°C~ 95°C) | 8GB | (1Gx16)x4 | 1Rx16 | TS1GLA64V6G | TS1GSA64V6G |
| | 16GB | (2Gx8)x8 | 1Rx8 | TS2GLA64V6E | TS2GSA64V6E |
| | 32GB | (2Gx8)x16 | 2Rx8 | TS4GLA64V6E | TS4GSA64V6E |
| Wide Temp. (-40°C ~ 95°C) | 8GB | (1Gx16)x4 | 1Rx16 | - | TS1GSA64V6G-I |
| | 16GB | (2Gx8)x8 | 1Rx8 | - | TS2GSA64V6E-I |
| | 32GB | (2Gx8)x16 | 2Rx8 | - | TS4GSA64V6E-I |
| | 48GB | (3Gx8)x16 | 2Rx8 | - | TS6GSA64V6E3-I |

Product specifications are subject to change without notice. Pictures shown may differ from actual products. Due to the complexity and variety of industrial applications, Transcend cannot guarantee 100% compatibility with all platforms and under all scenarios. For special applications and environments, it is strongly suggested that you contact Transcend beforehand for clarification.

DDR5-4800 Unbuffered DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM | SO-DIMM |
|------------------------------|----------|-----------------------|-------------|-------------|---------------|
| Standard Temp. (0°C~95°C) | 8GB | (1Gx16)x4 | 1Rx16 | TS1GLA64V8G | TS1GSA64V8G |
| | 16GB | (2Gx8)x8 | 1Rx8 | TS2GLA64V8E | TS2GSA64V8E |
| | 32GB | (2Gx8)x16 | 2Rx8 | TS4GLA64V8E | TS4GSA64V8E |
| Wide Temp. (-40°C ~ 95°C) | 8GB | (1Gx16)x4 | 1Rx16 | - | TS1GSA64V8G-I |
| | 16GB | (2Gx8)x8 | 1Rx8 | - | TS2GSA64V8E-I |
| | 32GB | (2Gx8)x16 | 2Rx8 | - | TS4GSA64V8E-I |

DDR5-5600 ECC DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM | SO-DIMM |
|---------------------------------|----------|-----------------------|-------------|-------------|-------------|
| Extended Temp. (-20°C~ 95°C) | 16GB | (2Gx8)x10 | 1Rx8 | TS2GLA72V6E | TS2GSA72V6E |
| | 32GB | (2Gx8)x20 | 2Rx8 | TS4GLA72V6E | TS4GSA72V6E |

DDR5-4800 ECC DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM | SO-DIMM |
|------------------------------|----------|-----------------------|-------------|-------------|---------------|
| Standard Temp. (0°C~95°C) | 16GB | (2Gx8)x10 | 1Rx8 | TS2GLA72V8E | TS2GSA72V8E |
| | 32GB | (2Gx8)x20 | 2Rx8 | TS4GLA72V8E | TS4GSA72V8E |
| Wide Temp. (-40°C~95°C) | 16GB | (2Gx8)x10 | 1Rx8 | - | TS2GSA72V8E-I |
| | 32GB | (2Gx8)x20 | 2Rx8 | - | TS4GSA72V8E-I |

DDR5-6400 Registered DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM |
|------------------------------|----------|-----------------------|-------------|--------------|
| Standard Temp. (0°C~85°C) | 16GB | (2Gx8)x10 | 1Rx8 | TS2GAR80V4E3 |
| | 32GB | (2Gx8)x20 | 2Rx8 | TS4GAR80V4E3 |

DDR5-5600 Registered DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM |
|---------------------------------|----------|-----------------------|-------------|-------------|
| Extended Temp. (-20°C~ 95°C) | 16GB | (2Gx8)x10 | 1Rx8 | TS2GAR80V6E |
| | 32GB | (2Gx8)x20 | 2Rx8 | TS4GAR80V6E |

DDR5-4800 Registered DIMM

| | Capacity | Component Composition | Rank x Org. | Long-DIMM |
|------------------------------|----------|-----------------------|-------------|---------------|
| Standard Temp. (0°C~95°C) | 16GB | (2Gx8)x10 | 1Rx8 | TS2GAR80V8E |
| | 32GB | (2Gx8)x20 | 2Rx8 | TS4GAR80V8E |
| Wide Temp. (-40°C~95°C) | 32GB | (2Gx8)x20 | 2Rx8 | TS4GAR80V8E-I |