

# DDR5 SODIMM

BIWIN DDR5 SODIMM is a high-performance, low-power, 262-pin memory module fully compliant with JEDEC DDR5 specifications. Operating at 1.1 V, it delivers data transfer rates up to 5600 MT/s, offering a significant performance improvement while maintaining energy efficiency. The module supports an operating temperature range of 0°C to 85°C for reliability across varied environments. Built with premium ICs for excellent compatibility and long-term stability. The module integrates advanced features, including on-die ECC for error correction, an onboard PMIC (Power Management IC) for improved power integrity, and an internal temperature sensor for real-time thermal monitoring. BIWIN DDR5 SODIMM is ideal for demanding applications, including high-performance laptops and gaming notebooks, mini PCs, all-in-one systems, mobile workstations, network-attached storage, and embedded systems.



## Key Features

### High-Quality Components for High-Speed, Stable Operation

BIWIN DDR5 SODIMM uses premium ICs for consistent quality and high-speed performance. With data rates up to 5600 MT/s, this SODIMM delivers stable operation and excellent compatibility across platforms.

### Low Power Consumption with Enhanced Thermal Management

Operating at a low voltage of 1.1 V, the module is optimized for energy efficiency in high-frequency applications. The onboard Power Management IC (PMIC) enhances power signal integrity, while the onboard SPD hub includes a built-in temperature sensor for real-time thermal monitoring and improved reliability.

### Dual-Channel Architecture for Higher Bandwidth Efficiency

Available in 4800 MT/s and 5600 MT/s data rates, BIWIN DDR5 SODIMM is designed with dual 32-bit sub-channels, double burst length, and support for Same-Bank Refresh commands. These architectural enhancements significantly improve data throughput, boosting performance in multi-tasking, and high-load workloads.

### On-Die ECC with Extensive Validation for Data Integrity

BIWIN DDR5 SODIMM supports on-die ECC for real-time detection and correction of single-bit errors, reducing the risk of system crashes. Each module also undergoes strict quality control and testing to provide long-term reliability in high-performance computing environments.

## Technologies

Underfill

Sidfill

30µm Gold Finger

Anti-Sulfuration

## Applications

 Laptop

 Mini PC

 All-in-One PC

 Compact Workstation PC

 High-Speed Network Storage System

 Embedded System

## Specifications

<b>Model Name</b>	DDR5 SODIMM
<b>DIMM Type</b>	Unbuffered Memory
<b>Capacity</b>	16 GB / 32 GB
<b>Data Rate</b>	4800 / 5600 MT/s
<b>Pin</b>	262 Pin
<b>Voltage</b>	1.1 V
<b>PCB Gold Finger Thickness</b>	3 $\mu$ " / 30 $\mu$ "
<b>Anti-Sulfuration</b>	Customizable
<b>Dimensions</b>	69.60 x 30.00 x 3.70 mm
<b>Operating Temperature</b>	0°C to + 85°C
<b>Storage Temperature</b>	-55°C to + 100°C
<b>Certifications</b>	RoHS, CE, FCC
<b>Warranty</b>	3-Year Limited

1. Tested by BIWIN labs. Actual performance may vary due to systems, devices, or environment.
2. Maintenance and future updates are required throughout the product lifecycle. Specifications are subject to change without notice.
3. The pictures are for illustration only. Actual products may vary due to product enhancements or changes.
4. Not all products are sold in all regions of the world.
5. Please visit [www.biwin technology.com](http://www.biwin technology.com) for warranty details in your region.
6. For more information, please contact [sales@biwintech.com](mailto:sales@biwintech.com).

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