

# DDR5 UDIMM

BIWIN DDR5 UDIMM is a high-performance, low-power 288-pin memory module fully compliant with JEDEC DDR5 standards. Operating at 1.1 V, it supports fast data transfer rates up to 5600 MT/s for significantly improved performance. It is designed to operate within a temperature range of 0°C to +85°C for reliable performance across various systems. The module is built with premium components for more stability, more reliability, and broader compatibility. It features on-die ECC (Error Correction Code) for improved data integrity, an integrated PMIC (Power Management IC) for better power regulation, and thermal monitoring for operational stability. BIWIN DDR5 UDIMM is widely used in desktops, workstation PCs, all-in-one PCs, and high-performance gaming PCs.



## Key Features

### Premium Components for High-Speed Stability

Built with high-quality ICs, BIWIN DDR5 UDIMM supports data rates up to 5600 MT/s, delivering consistent performance under sustained workloads.

### Low Power Consumption and Thermal Optimization

Operating at just 1.1 V, BIWIN DDR5 UDIMM minimizes power consumption while maintaining stability at high frequencies. 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.

### Dual-Channel Architecture for Improved Throughput

Available in 4800 MT/s and 5600 MT/s data rates, BIWIN DDR5 UDIMM is designed with dual 32-bit sub-channels, double burst length, and supports 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 UDIMM supports on-die ECC for real-time detection and correction of single-bit errors, reducing the risk of system crashes. Each unit also undergoes rigorous quality testing to ensure reliable operation in performance-critical computing environments.

## Technologies

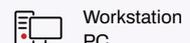
Underfill

Sidfill

30μm Gold Finger

Anti-Sulfuration

## Applications



## Specifications

<b>Model Name</b>	DDR5 UDIMM
<b>DIMM Type</b>	Unbuffered Memory
<b>Capacity</b>	16 GB / 32 GB
<b>Data Rate</b>	4800 / 5600 MT/s
<b>Pin</b>	288 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>	133.35 x 31.25 x 3.90 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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