



RU200 DDR5 Memory



Up to
5600 MB/s



Low Power
Consumption



PMIC



On-Die ECC

Biwin RU200 DDR5 offers speeds up to 5600 MT/s, delivering exceptional performance and efficiency for IO-intensive tasks. Its low operating voltage of 1.1 Volts reduces heat and power consumption by 20% compared to DDR4, ensuring stable performance. Enhanced with advanced PMIC and On-Die ECC (error correction), Biwin RU200 improves data speed and bandwidth, making life easier for anyone confronting intensive applications.

► Product Features

High Performance, Enhanced Efficiency

The new DDR5 standard improves access efficiency and delivers faster data processing speeds to meet the demands of more IO-intensive computing tasks. It ensures smooth operation for office work, modeling, editing, and gaming.

Low Power Consumption

Biwin RU200 offers high efficiency due to a lower power consumption with an operating voltage as low as 1.1 Volts. Compared to DDR4, the heat generated in memory operation is reduced, decreasing the need of cooling and ensuring a more stable operation under high-intensive conditions.

PMIC, Stable Data Transmission

Biwin RU200 is equipped with a power management IC (PMIC), which is integrated on the memory PCB. It shortens the wiring distance and improves power management efficiency and stability. It provides data integrity and also offers higher MT/s solutions.

On-Die ECC, Improved Data Accuracy

Biwin RU200 uses On-Die ECC (error correction) to enhance data accuracy. This advanced technology dynamically corrects data failure, significantly reducing the risk of data corruption and ensuring memory stability and reliability.

► Biwin Storage

For decades, Biwin has made the critical storage and memory in many of the leading digital devices that have defined our digital world. The Biwin consumer brand offers the best of Biwin's experience, a range of SSDs, DRAM, memory cards and related accessories that will help you get the most out of your devices.

Our cutting-edge facilities use the latest technologies including our own chip packaging, software and hardware labs, state-of-the-art clean rooms, and our own award-winning manufacturing equipment. We are especially proud of our extraordinary rigorous chain of testing that assures we're offering you the best in reliability.

► Specifications

Model Name	Biwin RU200
RAM Type	DDR5 UDIMM
Capacity	8 GB (8 GB x 1) 16 GB (8 GB x 2) 16 GB (16 GB x 1) 32 GB (16 GB x 2) 32 GB (32 GB x 1)
Data Rate	4800 / 5600 MT/s
Timing	CL40 / CL46
Rank	1R x 8 / 2R x 8 / 1R x 16
Operating Voltage	1.10 V
Pin	288 Pin
Dimensions	133.35 x 31.25 x 4.00 mm (max)
Operating Temperature	0°C to +85°C
Storage Temperature	-40°C to +85°C
Certifications	FCC, CE, KCC, BMSI, RCM, WEEE, RoHS, UKCA, VCCI
Warranty	Limited Lifetime

► Order Information

Part Number	Capacity	Rank	Data Rate (MT/s)	Timing	Voltage	Package	Warranty
BMU58G56UD-S46AX	8 GB	1R x 8	5600	CL46-45-45	1.10 V	8 GB x 1pcs	Lifetime
BMU58G48UD-S40AX	8 GB	1R x 8	4800	CL40-39-39	1.10 V	8 GB x 1pcs	Lifetime
BMU51648UD-S40AB	16 GB	1R x 8	4800	CL40-39-39	1.10 V	16 GB x 1pcs	Lifetime
BMU51656UD-S46AB	16 GB	1R x 8	5600	CL46-45-45	1.10 V	16 GB x 1pcs	Lifetime
BMU51656UD-S46AB2	16 GB	2R x 8	5600	CL46-45-45	1.10 V	16 GB x 1pcs	Lifetime
BMU53256UD-S46AB	32 GB	2R x 8	5600	CL46-45-45	1.10 V	32 GB x 1pcs	Lifetime
BMU53248UD-S40AB	32 GB	2R x 8	4800	CL40-39-39	1.10 V	32 GB x 1pcs	Lifetime
BMU58G56UD-S46AXA	8 GB	1R x 16	5600	CL46-45-45	1.10 V	8 GB x 1pcs	Lifetime
BMU51648UD-D40AX	16 GB	1R x 8	4800	CL40-39-39	1.10 V	8 GB x 2pcs	Lifetime
BMU53248UD-D40AB	32 GB	1R x 8	4800	CL40-39-39	1.10 V	16 GB x 2pcs	Lifetime
BMU51656UD-D46AX	16 GB	1R x 8	5600	CL46-45-45	1.10 V	8 GB x 2pcs	Lifetime
BMU53256UD-D46AB	32 GB	1R x 8	5600	CL46-45-45	1.10 V	16 GB x 2pcs	Lifetime

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. Instructions for purchasing high-frequency memory: Overclocking memory needs to be equipped with a matching motherboard and processor to exert its overclocking performance. Please verify prior to purchase whether your motherboard and CPU support the specifications of Biwin DRAM. Activate XMP after installation to enjoy the overclocking speed.
6. For detailed compatibility information, including supported motherboards and validated configurations, please refer to the official memory module compatibility list (QVL). We recommend reviewing the list before purchase to ensure optimal integration and performance.
7. Please visit www.biwintech.com for more details.

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Scatolo PAP-21	Manuale PAP-22	Vaschetta P21-1
Carta	Carta	Plastica

RACCOLTA DIFFERENZIATA

Verifica le disposizioni del tuo Comune.
Separa le componenti e conferiscile in modo corretto.



Statement Regarding the Data Rates of Memory Products

The maximum data rates indicated for memory products are overclocking performance metrics achievable under specific conditions and are not the default out-of-the-box frequencies. Please find the complete details below:

1 INTEL® XMP/ AMD EXPO™ Function Must Be Enabled

This product is an overclocking-type memory module. The stated maximum data rate can only be achieved by manually enabling INTEL® XMP or AMD EXPO™ in the motherboard BIOS. If this function is not enabled, the memory will run at the default JEDEC standard frequency and will not reach its stated maximum performance.

2 Any Stated Data Rate Depends on Hardware Compatibility

Achieving the stated maximum data rate depends on system hardware and software conditions, including the CPU model, motherboard chipset, BIOS version, and memory slot configuration. Before purchasing, please be sure to consult the official QVL (Qualified Vendor List) and compatibility notes to confirm that your hardware configuration is supported.

3 Risk Warning for Overclocking and Additional Settings

This product comes with preset overclocking parameters as determined by extensive testing in our labs. Manual overclocking beyond the official presets (including adjusting frequency, timings, voltage, etc.) is not recommended. Unauthorized custom operations may lead to:

- System instability, blue screens, crashes, or restarts
- Damage to memory, CPU, motherboard, or other hardware
- Data loss, file corruption, or system crashes
- Voiding of the product warranty

4 Performance Description and Advertising Compliance Statement

All stated performance parameters that accompany our products are test results obtained under ideal laboratory conditions. They are provided for product specification purposes only and do not constitute a promise or guarantee of any user's actual operational results, speed, or stability. Actual operating frequencies and performance may vary due to differences in equipment; no absolute uniform effect is guaranteed.

5 Limitation of Liability

The company and its authorized distributors shall not be liable for breach of contract or tort for any direct or indirect losses (including but not limited to hardware damage, data loss, business interruption, or failure to achieve stated performance) resulting from failure to operate according to instructions, failure to enable XMP/E.X.P.O, hardware incompatibility, unauthorized overclocking, improper system settings, or other related causes. Product warranty is subject to the official warranty terms; improper operation will void the warranty.

By confirming the purchase, installing, or using this product, the user is deemed to have read, understood, and agreed to all terms of this statement, and to be fully aware of the conditions required to achieve the performance of overclocked memory and the associated potential risks. If you have any questions regarding product specifications, usage conditions, or compatibility, please contact official technical support before purchasing.