

DDR5 LPCAMM2

BIWIN LPCAMM2 (Low Power Compression Attached Memory Module 2) is a groundbreaking DDR5 memory form factor defined by JEDEC. It features LPDDR5X memory and a 644-pin CAMM2 interface, enabling improved signal integrity, higher bandwidth, and reduced power consumption. Supporting dual-channel (128-bit) architecture, LPCAMM2 offers data rates up to 7500 MT/s, delivering up to 30% higher theoretical bandwidth than DDR5 SODIMM at 5600 MT/s, while reducing active power consumption by 58% and standby power by 80%. Compared to soldered LPDDR, LPCAMM2 provides greater upgrade flexibility.



Key Features

CAMM2 Interface with Dual-Channel Support

BIWIN LPCAMM2 uses the new CAMM2 interface that meets JEDEC standards, featuring a 128-bit dual-channel architecture. Each module supports up to 128 GB capacity, enabling higher memory density in compact form factors.

LPDDR5X for Higher Bandwidth and Power Efficiency

Equipped with cutting-edge LPDDR5X DRAM, LPCAMM2 significantly improves bandwidth and energy efficiency. Compared to DDR5 SODIMM 5600 MT/s dual-channel (1DPC) modules, LPCAMM2 at 7500 MT/s achieves up to 30% higher theoretical bandwidth, while reducing active power consumption by 58% and standby power consumption by 80%.

Smaller Form Factor for Space-Constrained Devices

BIWIN LPCAMM2 cuts module footprint by up to 60% compared to traditional dual SODIMM (1DPC) configurations, making it ideal for ultra-thin laptops, mobile workstations, and space-constrained designs.

Broader Compatibility

BIWIN LPCAMM2 is compatible with Intel platforms that support the 644-pin LPCAMM2 interface, including Meteor Lake, Arrow Lake HX, Panther Lake, and Granite Rapids.

Technologies

10 μ m Gold Finger

Anti-Sulfuration

Applications



Laptop



AI PC



Tablet



Industrial
Handheld Devices



Automotive
Diagnostic Computers

Model Name	LPDDR5X CAMM2 (LPCAMM2)
DIMM Type	LPCAMM2
Capacity	32 / 64 GB
Data Rate	7500 / 8533 (2026 Q4 MP) / 9600 (2027 Q2 MP) MT/s
Pin	644 Pin
Voltage	1.05 V / 0.5 V
PCB Gold Finger Thickness	10 μ " (Customizable)
Anti-Sulfuration	Customizable
Dimensions	78.00 x 34.00 \pm 0.15 mm
Operating Temperature	-25°C to + 85°C
Storage temperature	-55°C to + 100°C
Certifications	RoHS, CE, FCC
Warranty	3-Year Limited

Order Information

Capacity	Data Rate	Part Number
32 GB	7500 MT/s	B45HMEGC00R-MC82
32 GB	8533 MT/s	B45HMEGC00R-MC82 / To be released in 2026 Q4
32 GB	9600 MT/s	To be released in 2027 Q2
64 GB	7500 MT/s	B45HMEGC00R-MC82
64 GB	8533 MT/s	B45HMEGC00R-MC82 / To be released in 2026 Q4
64 GB	9600 MT/s	To be released in 2027 Q2

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.biwintech.com for warranty details in your region.
6. For more information, please contact sales@biwintech.com.

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