



# Mini SSD CL100



15.0 mm × 17.0 mm  
× 1.4 mm



Up to 3700 MB/s Read  
and 3400 MB/s Write



Advanced Hybrid  
BGA (FC+WB)  
Packaging



Stability and  
Durability

The Biwin Mini SSD CL100 is a high-performance, ultra-mini storage solution. Measuring just 15.0 mm × 17.0 mm × 1.4 mm, it combines SSD performance with the size of a small coin or just about the size of a microSD card. With PCIe 4.0 x2 and NVMe 1.4, it delivers impressive read speeds up to 3700 MB/s and write speeds up to 3400 MB/s, with capacities ranging from 512 GB to 2 TB for mobile gaming, working remote, or managing large-scale data. To unlock its full potential, pair the CL100 with the Biwin Mini SSD Reader RD510\*, a sleek, plug-and-play companion.

## ► Product Features

### Ultra-Mini Form Factor

The Biwin CL100 uses advanced Hybrid BGA (FC+WB) packaging technology, integrating the controller and flash memory modules into an ultra-compact 15.0 mm × 17.0 mm × 1.4 mm form — roughly the size of a microSD card (about the size of a small coin). This miniaturized design maximizes space efficiency, ideal for ultra-thin laptops, mini PCs, handheld gaming solutions, and other devices, enabling innovative, sleek designs. Plus, it offers an intuitive, hassle-free, SIM card-like expansion experience for users.

### Powerful PCIe 4 Performance

The Biwin CL100 leverages a PCIe 4x2 interface and NVMe 1.4 protocol, achieving sequential read speeds up to 3700 MB/s and write speeds up to 3400 MB/s. Ideal for tasks like AI model training, 4K video editing, or running demanding applications, it delivers fast and efficient performance with minimal lag and stuttering, providing a smooth and responsive experience.

### Stable, Reliable, and Comprehensive Protection

The Biwin CL100 combines rugged durability with advanced protection, featuring IP68-rated dustproof and waterproof protection and the ability to withstand drops from up to 3 meters. Its integrated hardware and firmware design offers stable performance in harsh environments such as vibration and humidity. The Biwin CL100 provides reliable data protection and uninterrupted performance for peace of mind with every use.

### Advanced Technology for Enhanced Performance

The Biwin CL100 leverages advanced technologies, including dynamic SLC cache, wear leveling, TRIM command, garbage collection, intelligent thermal throttling, intelligent low-power management, HMB, and S.M.A.R.T. for speed, durability, and energy efficiency. It offers smooth performance, even under heavy load, with faster load times, enhanced responsiveness, and long-term reliability. Perfect for gaming, video editing, and demanding applications, all in a compact, space-saving design.

## ► Biwin Storage

For decades, Biwin has made the critical storage and memory you'll find 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, USBs 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 extraordinarily rigorous chain of testing to provide you with the best in reliability.

## ► Specifications

<b>Model Name</b>	Biwin CL100		
<b>Form Factor</b>	Mini SSD		
<b>Interface</b>	PCIe Gen4×2, NVMe 1.4		
<b>DRAM Cache</b>	DRAM-less		
<b>Capacity</b>	512 GB	1 TB	2 TB
<b>Sequential Read (Up to)</b>	3700 MB/s	3700 MB/s	3700 MB/s
<b>Sequential Write (Up to)</b>	2400 MB/s	3400 MB/s	3400 MB/s
<b>Random Read 4K (Up to)</b>	450K IOPS	550K IOPS	550K IOPS
<b>Random Write 4K (Up to)</b>	550K IOPS	650K IOPS	650K IOPS
<b>Dimensions</b>	15.00 × 17.00 × 1.40 mm		
<b>Weight</b>	≤ 1 g		
<b>Operating Temperature</b>	0°C to +70°C		
<b>Storage Temperature</b>	-40°C to +85°C		
<b>MTBF</b>	1,500,000 hours		
<b>Certifications</b>	RoHS, FCC, CE, CB, KCC, BSMI, VCCI, RCM, UKCA		
<b>Warranty</b>	3-Year / 375 TBW	3-Year / 750 TBW	3-Year / 1500 TBW

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. As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on the operating environment. As used for buffer or cache, one megabyte (MB) = 1,048,576 bytes. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabyte per second (GB/s) = one billion bytes per second.
6. MTBF = Mean Time Between Failures based on internal testing using Telcordia stress testing standard.
7. Please visit [www.biwintech.com](http://www.biwintech.com) for more details.

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