

INTEL 1851 Mycro Pro RGB

High Performance Cooling Solutions

The Thermal Grizzly Intel 1851 Mycro Pro RGB is a CPU water block for Intel's LGA1851 and LGA1700 sockets. It consists of four primary components: a nickel-plated copper cold plate, a cooler plate made of tempered acrylic glass, a jet plate for flow optimization, and a cover made of anodized aluminum. Beneath the cover is RGB LED lighting that accentuates the clean design when illumination is desired. The RGB LEDs can be controlled via a 3-pin ARGB header (+5V/DATA/GND) through the motherboard.

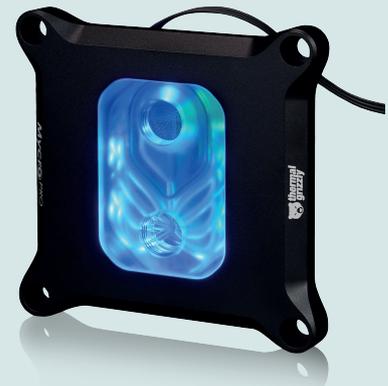
Thermal Grizzly's Ultra High Performance cold plates for CPU and GPU coolers are milled with minimal and highly optimized slot and fin widths. In the case of the Intel 1851 Mycro Pro RGB, the slot and fin width on the nickel-plated copper cooling plate is 0.2 mm each. A total of 70 microfins are located on the cold plate of the CPU water block. This high number of thin fins provides a very large surface area, allowing the coolant to dissipate heat quickly and efficiently. The cooler design milled into the acrylic glass, including a jet plate, is optimized for flow and delivers outstanding cooling performance in combination with the highly optimized cooling fins. The Intel 1851 Mycro Pro RGB is integrated into a custom water-cooling loop via two ports, one inlet and one outlet, each featuring G1/4-inch threads in the acrylic glass. A fine-mesh filter in the form of a sieve is located at the inlet port.

After milling, the acrylic glass undergoes an annealing process that relieves internal stresses. This reduces the risk of stress cracks over long periods of use. The sealing rings used (O-rings) are made of highly elastic EPDM (ethylene propylene diene rubber), which is resistant to ozone and UV radiation.

Thermal Grizzly Intel 1851 Mycro Pro RGB in Testing

In Thermal Grizzly's in-house CPU water block test system, the Intel 1851 Mycro Pro RGB was able to cool the Intel Core Ultra 9 285K, configured with fixed performance parameters, to an average of 38.9°C under full load and effectively dissipate the resulting thermal power (TDP) of around 260 watts. The flow rate was 2.57 l/min. This places the Intel 1851 Pro RGB on the level of other CPU water blocks in the price-to-performance segment and it also performs well compared to high-end models.

Due to its fixed performance parameters, the Intel Core Ultra 9 285K tested generates nearly twice the thermal power dissipation as an unmodified 285K, which, according to Intel, has a TDP of 125 watts (and a short-term, maximum boost of up to 250 watts, depending on the motherboard).



Key Information

- High-performance CPU water block for Intel LGA1851 socket
- Fine-Mesh Filter at the Inlet Port
- Nickel-plated copper cold plate with ultra-high-performance microfins (0.2 mm)
- Metal housing with RGB-illuminated viewing window and internal layout
- Inlet and outlet ports with standard G1/4" threads
- Compatibility list available online

Scope of delivery

- 1x Intel 1851 Mycro Pro RGB
- 1x Pressure test certificate for 600 mbar
- 1x LGA1851 Backplate
- 1x Allen Key 2 mm
- 1x Allen Key 2.5 mm
- Mounting Kit:
 - 4x Thumb Nuts
 - 4x Standoff M4 Screws
 - 4x Steel Springs
 - 4x Polyamid M4 Washers

Overview of the CPU water block test system:

- Intel Core Ultra 9 285K (5,4 GHz, 1.4 Vcore, LLC Low, XMP7600 (ca. 260 Watt))
- Watercool MO-RA3, including four 200 mm Noctua fans Low-resistance flow sensor Keyence FD-X
- Xylem Lowara D5 pump with a pump speed of approx. 3,400 rpm
- Thermal Grizzly Kryonaut

Technical data

| Name: | Item number: | EAN code: | Packaging size: | Net weight: * | Gross weight:* | PU: |
|--------------------------|-------------------|---------------|-----------------|---------------|----------------|-------|
| Intel 1851 Mycro Pro RGB | TG-MY-P-RGB-i1851 | 4260711992735 | 15,6x4x11,8 cm | 218g | 405g | 4Pcs. |

*Net weight is the total weight of an article excluding the weight of packaging and accessories. The gross weight refers to the total weight of the product including accessories and packaging. Slight weight deviations are possible due to production factors.

General Notes on Water-Cooling Products

- Do NOT use in combination with water-cooling components made of aluminum where the coolant comes into contact with aluminum, such as radiators with aluminum tubing.
- We recommend suitable coolants that contain biocides and corrosion inhibitors and are free of particles that could restrict water flow or clog the loop.
- The custom water-cooling system should be tested for leaks with an air pressure tester for at least 1 hour before filling.
- After filling, the system should be regularly inspected during the first 24 hours for any potential coolant leaks.

Quality Without Compromise: Made in Germany

The Intel 1851 Mycro Pro RGB is manufactured at our production facility in Germany in accordance with the highest quality standards. Throughout the entire production chain, the process is continuously monitored by our professionally trained staff. Particular attention is given to the microfins, which are especially protected from contamination during production. All Intel 1851 Mycro Pro RGB units also undergo a compressed-air pressure test (600 mbar) after assembly as part of quality control.

Please note

The data in this technical data sheet are based on our current knowledge and experience. Due to the large amount of possible factors, this should not be construed as to release the users from doing their own tests and screening. No legally binding assurance of specific properties or applicability for a concrete purpose should be derived from these data. Please consider contacting us for further detail. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

Integrated filter for consistently high cooling performance

The integrated filter captures particles present in the water-cooling loop. These may include production residues, for example from radiators. To prevent the microfins in the copper cooler from becoming clogged, these particles are filtered out directly at the inlet port. Contamination of the microfins can impair the flow of the coolant and thereby reduce cooling performance. This may result in higher CPU temperatures. The filter helps delay this effect and can be cleaned if necessary.

Product-Specific Notes

- The Intel 1851 Mycro Pro RGB is compatible with the Intel High Performance Heatspreader V1 (for the LGA1700 socket).
- The fluid inlet has been optimized for the LGA1851 (with stock heatspreader), but can also be used with LGA1700 socket CPUs.
- The G1/4-inch threads of the inlet and outlet ports are each 6 mm deep. The Intel 1851 Mycro Pro RGB is not compatible with Direct-Die.

Trademark Information

Thermal Grizzly is a registered trademark.