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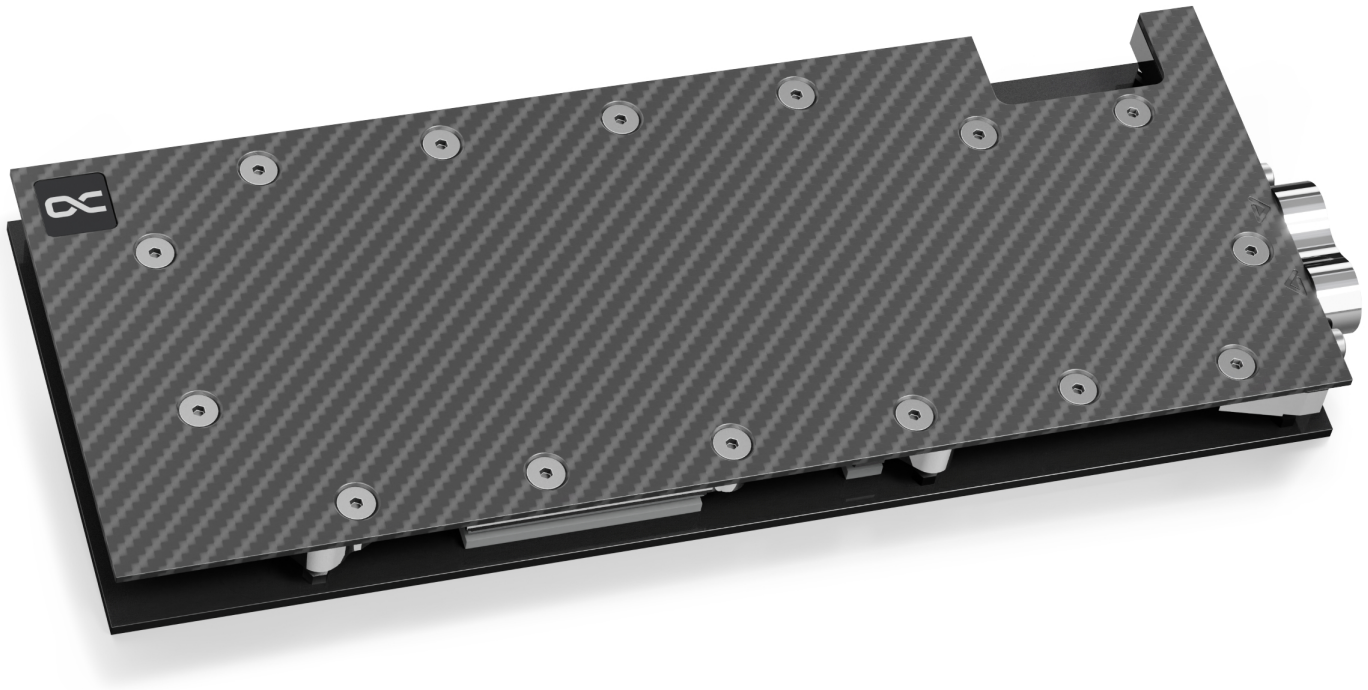
Alphacool ES RTX 3080/3090 Reference Copper/Carbon mit Backplate

Alphacool article number: 10670



Quick Info

The Alphacool ES GPX Copper/Carbon water cooler with backplate was developed for the Alphacool Enterprise Series. Due to the positioning of the connections, the hosing of the cooler in the server rack is significantly simplified. The top of the cooler is made of carbon. This makes the water cooler lighter compared to Alphacool's Eisblocks with acetal or acrylic tops. Thanks to the compact design, only 1 slot is needed to mount the cooler in the server rack instead of 1.5 slots as before. This additional space saving is one more argument for using the ES GPX Copper/Carbon graphics card water cooler.

- Fullcover water cooler
- Nickel-plated copper radiator bottom
- Noble material mix of carbon & copper

Compatibility

- Gainward GeForce RTX 3080 Ti 12GB Phoenix
- Gainward RTX 3080 Phoenix
- Gainward RTX 3080 Phoenix GS
- Gainward RTX 3090 Phoenix
- Gainward RTX 3090 Phoenix GS
- INNO3D GEFORCE RTX 3080 TI ICHILL X4
- INNO3D GEFORCE RTX 3080 TI ICHILL FROSTBITE
- INNO3D GEFORCE RTX 3080 TI ICHILL X3
- INNO3D GEFORCE RTX 3080 TI X3
- INNO3D GEFORCE RTX 3080 TI X3 OC
- Inno3D GeForce RTX 3080 iChill X3/X4 10240 MB GDDR6X
- Inno3D GeForce RTX 3080 Twin X2 OC 10240 MB GDDR6X
- INNO3D GEFORCE RTX 3080 12GB ICHILL FROSTBITE LHR
- INNO3D GEFORCE RTX 3080 12GB X3 OC LHR
- INNO3D GEFORCE RTX 3080 12GB ICHILL X3/X4 LHR
- INNO3D GEFORCE RTX 3080 12GB ICHILL BLACK LHR
- Inno3D GeForce RTX 3090 iChill X3/X4, 24576 MB GDDR6X
- Inno3D GeForce RTX 3090 Gaming X3, 24576 MB GDDR6X
- Palit GeForce RTX 3080 Ti GamingPro
- Palit GeForce RTX™ 3080 GamingPro
- Palit GeForce RTX™ 3080 GamingPro OC
- Palit GeForce RTX™ 3090 GamingPro
- Palit GeForce RTX™ 3090 GamingPro OC
- Zotac Gaming GeForce RTX 3080 Ti AMP Holo
- Zotac GeForce RTX 3080 Ti AMP HoloBlack
- Zotac Gaming GeForce RTX 3080 Ti Trinity
- Zotac Gaming GeForce RTX 3080 Ti Trinity OC
- Zotac GAMING GeForce RTX 3080 Trinity
- Zotac Gaming GeForce RTX 3080 Trinity OC
- Zotac GeForce RTX 3090 Trinity, 24576 MB GDDR6X
- Galakuro NVIDIA GEFORCE RTX 3080 GG-RTX3080-E10GB/TP
- Galakuro NVIDIA GEFORCE RTX 3090 GG-RTX3090-E24GB/TP
- Galax GeForce RTX 3080 SG 10GB GDDR6X 320-bit DP*3/HDMI
- Galax GeForce RTX 3090 SG 24GB GDDR6X 320-bit DP*3/HDMI
- KFA2 GeForce RTX 3080 SG 10GB GDDR6X 320-bit DP*3/HDMI
- KFA2 GeForce RTX 3090 SG 24GB GDDR6X 320-bit DP*3/HDMI
- PNY GeForce RTX 3080 XLR8 Gaming EPIC-X RGB 10240 MB GDDR6X (VCG308010TFXMPB)
- PNY GeForce RTX 3080 XLR8 Gaming EPIC-X RGB 10240 MB GDDR6X (VCG308010TFXPPB)
- PNY GeForce RTX 3090 XLR8 Gaming EPIC-X RGB, 24576 MB GDDR6X

Scope of delivery

1x 8x74x1mm thermal pad (7 W/mk)
2x 15x51x1mm thermal pad (7 W/mk)
1x 15x40x1mm thermal pad (7 W/mk)
1x 8x8x1mm thermal pad (7 W/mk)
1x 8x84x1mm thermal pad (7 W/mk)
1x 15x15x1mm thermal pad (7 W/mk)
2x 15x51x2mm thermal pad (3 W/mk)
1x 15x40x2mm thermal pad (3 W/mk)
1x 30x30x2mm thermal pad (3 W/mk)
1x 15x15x2mm thermal pad (3 W/mk)
1x 8x74x3mm thermal pad (3 W/mk)
1x 8x84x3mm thermal pad (3 W/mk)
2x 15x51x3mm thermal pad (3 W/mk)
1x 15x40x3mm thermal pad (3 W/mk)
1x 15x15x3mm thermal pad (3 W/mk)
4x M2x5 screws
4x M2x5 washers
1x Thermal grease (Subzero 16 W/mk)
7x M2x11 screws
1x backplate

Technical data cooler

L x W x H	247,30 x 95,35 x 23,08mm
Material cooler	Nickle-plated copper
Material cooler top	carbon
Threads	2 x G1/4"
Thickness cooling fins	0,6mm
Maximum working temperature	60 °C
Pressure tested	0,8 Bar

Technical data backplate

L x W x H	237,20 x 95,35 x 6mm
Material	aluminium
Color	black

Download links

Manual	10670_Alphacool_ES_RTX_3080-3090_Reference_Copper-Carbon_mit_Backplate_Manual.pdf
Product pictures	10670_Alphacool_ES_RTX_3080-3090_Reference_Copper-Carbon_mit_Backplate_pics.zip

Packaging dimensions per unit

L x W x H	355 x 170 x 47 mm
Weight	1130 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197106702
Customs code	84195080900

Article text

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More performance!

Alphacool manages to position the cooler as close as possible to the components to be cooled. For this purpose, the heat conducting pads used are reduced to a thickness of 1mm. The maximum possible reduction in the thickness of the copper block and the optimization of the water flow inside the cooler allow all important components such as GPU, voltage converters and VRAMs to be cooled by water much better and more effectively. All of this provides a significant increase in cooling performance.

Connections on the back?

In order to save space in the width and height during installation, the water input and output have been moved to the back of the cooling block. This positioning of the connections makes hosing much easier. It enables easy integration of the GPU cooler into the water circuit even in the tightest server housings.

Copper or aluminum?

Alphacool uses only copper for all water-bearing parts. Copper has almost twice the thermal conductivity of aluminum and is therefore clearly the better choice of material for water cooling. The nickel-plated copper base is highly resistant to acid, which means that chipping of the nickel plating can be ruled out.

Thermal paste & thermal pads

The included thermal paste is Alphacool's Subzero with a thermal conductivity of 16 W/mk. The electrically non-conductive thermal paste is particularly well suited for high contact pressures, but can still be perfectly applied due to its viscosity of 850000 TF. For the thermal pads, Alphacool uses soft pads that fit perfectly to the components to be cooled and are very durable. The 2mm and 3mm thick pads have a thermal conductivity of 3 W/mk. The 1mm thick pads can dissipate 7 W/mk of heat.

Discreet appearance

The matte carbon finish gives the cooler a noble appearance. This makes it additionally interesting for private users who want to do without aRGB lighting.

Drawing