aquacomputer

Installation and user manual aquagraFX for GTX 590, 04/2011

Description

Thank you for purchasing a graphics card water block manufactured by aqua computer. The aquagraFX for GTX 590 has been specifically designed for graphics cards according to reference design of the chip manufacturer. The aquagraFX for GTX 590 effectively cools the RAM, voltage regulators and GPUs of your graphics card. The base part of the water block is manufactured from pure copper for outstanding performance and durability.

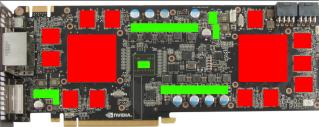
Installation



Remove the originally installed air cooling unit from the graphics card. The procedure necessary to perform this might slightly vary depending on the graphics card. Some of the original screws use a Torx drive, a suitable screw driver is included in the delivery of the aquagraFX for GTX 590. Remove the screws indicated with red dots in the figure. Use extreme caution not to damage any of the highly sensitive components of the graphics card! Disconnect the fan connector while lifting the air cooling unit off the graphics card.

Step 2:

Remove all thermally conductive pads from the graphics card and clean all surfaces with direct contact to the cooling unit from remaining thermal compounds using benzine if necessary.



Apply a thin layer of thermal compound to the GPUs and the RAM modules. These components are marked red in the figure. The thermal compound must not be electrically conductive! Cut fitting pieces from the thermally conductive pad supplied with the aquagraFX and place them on top of the components indicated by green rectangles.

Step 3:

Attach the aquagraFX for GTX 590 to the graphics card. The backplates of the air cooling unit are being **reused!** To do so, at first carefully and evenly screw in the four screws adjacent to the GPU, afterwards the remaining screws:

Ten screws M3x6 mm, red marks in the figure Three screws M3x4 mm, blue marks in the figure Two screws M3x8 mm, green marks <u>in the</u> figure



Step 4:

Carefully check that the water block has level contact to all relevant components of the graphics card. Do not power on the graphics card or the PC if the cooler does not perfectly fit the graphics card! In this case, disassemble and repeat the mounting procedure. All screws must not be overly tightened to prevent the PCB from twisting!

Step 5:

Insert the graphics card to your PC and integrate the water block into your cooling system. Be sure not to connect any water blocks in parallel but only consecutively. A detailed instruction on building a water cooling system and plug&cool connectors as well can be found on our website <u>www.aqua-computer.de</u> – please check the section support/download.

Step 6:

Put the water cooling system into operation, but do not connect any other PC components to the mains supply! Check the water block as well as the fittings for leakages and do not put your PC into operation unless you can definitively eliminate the possibility of coolant leaking from the system! If any component has been in contact with coolant, do not put it into operation before it is completely dry again! For operating the graphics card, the water block must be correctly mounted and be connected to a water cooling system featuring adequate cooling performance! For corrosion inhibition, either Double Protect Ultra or a mixture of water and ACfluid according to the preparation instructions provided with ACfluid must be used as coolant!

ATTENTION:

Disregarding the instructions may lead to severe damages! Aqua Computer GmbH & Co. KG cannot be held liable for damages or injuries resulting from improper installation or use of the product!

Thank you again for choosing an aqua computer product.