

The HEATKILLER® MB-X EVGA P67/Z68 FTW mainboard set is the optimum cooling solution for your EVGA mainboard. All relevant heat sources of the mainboard are cooled. This increases the stability and the overclocking potential at the same time.

Note: A coloured installation manual in PDF format is available in the service section of our homepage at (www.watercool.de)

Attention: Installation at your own risk. Non-observance of the installation instructions may damage the radiator. Watercool will assume no liability for damage to the hardware.

1. Preparing the installation



1. Voltage converter
2. Nvidia NF-200
3. Chipset Intel P67/Z68 Express

Figure 1: EVGA P67/Z68 FTW

First you have to remove the cooling modules 1, 2 and 3 shown in the illustration above. To do so, loosen the screws on the back of the mainboard. Please do not bend or damage the original cooling modules, especially the heat pipes, and keep these in case of a warranty claim on the mainboard.

Once the cooling modules are detached, please remove all remaining heat-conductive paste on the voltage converters or chipsets. Exercise great care in doing so! Ready-cut heat conductor pads are included with the HEATKILLER® MB-X set for installation.

Note: The voltage converters on the mainboards are extremely sensitive. Therefore, proceed with utmost care when removing the original heat sink and mounting the HEATKILLERS. Remove the mainboard completely before the installation.

2. Mounting the HEATKILLER® MB-X cooler - Voltage converter

Place the L-shaped cooler module onto the intended position for testing (position 1, fig. 1). Use the enclosed thermal conductor pads with the dimensions approx. 70mm x 13mm x 0.5mm for final installation of the cooler modules. Fit one pad each onto the voltage converters. Remove the protective foil on both sides of the pad prior to use.

To screw down the cooler module on the back of the mainboard, please use the provided screws M2.5x10 as well as one washer M2.5 each.

Note: *The washers are intended for the rear side to electrically insulate the screws from the mainboard. Always place all screws/nuts in the right position before tightening them. Only tighten the screws/nuts slightly in order not to damage the voltage converter. A few turns are sufficient.*

3. Mounting the HEATKILLER® MB-X cooler - Chipset

Place the cooler module onto the intended position for testing (position 2 and 3, fig. 1). For final installation of the cooler module, use the provided heat conductor pad with the approximate dimensions 15mm x 10mm x 1mm for the Nvidia NF-200 chip on position 2 (fig. 1). For the Southbridge on position 3 (fig. 1) use the heat conductor pad with the approximate dimensions 20mm x 20mm x 1mm.

To screw down the cooler module on the back of the mainboard, please use the provided screws M2.5x10 as well as one washer M2.5 each. The washers are intended for installation on the back to electrically insulate the screws of the mainboard. There are two holes in the cooler with the chipset in position 3 (fig. 1). These are intended for the two provided M2.5x12mm screws. Attach these screws to the back with one washer (M2.5) and one enclosed nut (M2.5) each.

Note: *The washers are intended for the rear side to electrically insulate the screws from the mainboard. Always place all screws/nuts in the right position before tightening them. Only tighten the screws/nuts slightly in order not to damage the voltage converter. A few turns are sufficient.*

4. Integration into the cooling system

The heat sinks of the HEATKILLER® SW-X series do not have a defined input or output, i.e. the flow direction is not important. When connecting the heat sink, make sure that no major pulling or pressing force is transferred from the tubes to the cooler.

Note: *Prior to commissioning, make absolutely sure that the connections are sealed. With some connections, the thread clearance may be too large. In this case, the connection cannot be tightened in the thread. Corresponding G1/4" spacers are included in the delivery for such connections. These are simply slid onto the connection and then this is screwed into the cooler. Please observe that the spacers have a seal on one side. These seals must point towards the cooler to ensure sealing.*

5. Installation and leak test

After installation, a check and test run must be performed! A leak test should be performed while the computer is turned off. The hardware may not be activated during the test run! Check all those connections.

6. Ventilation tips

Air in the system can have a negative effect on the cooling power. This is why it makes sense to air the system after a new installation or changing the circuit. Please note that air always tends to accumulate in the highest spot. This is often the radiator. But the air also behaves identical in the radiator itself. There are different methods for successful airing. The ideal case is if the compensation container (CC) is located in the highest spot. When airing with a closed circuit (CC closed), you can also put the system on its head and/or swing it back and forth accordingly so that the air travels to the CC. Here please note that other hardware may not be able to handle such a treatment and may become damaged. We will not assume any liability for possible damage. In addition, you can also use the two unused connection threads for filling or airing depending on the installation position of the radiator.

High-quality 12V pumps (e.g. our Watercool Eheim 12V) have a comfortable airing mode. If this is turned on, the pumps air the system independently. For further information see the corresponding operating manuals.

7. General information

We recommend using demineralised or deionised water (distilled water) as cooling medium. To prevent the build-up of algae, use common citric acid, this reliably prevents the spread of algae.

Despite modern production methods, contamination may remain in the radiator due to production reasons. We therefore recommend rinsing it with clear water prior to first use.

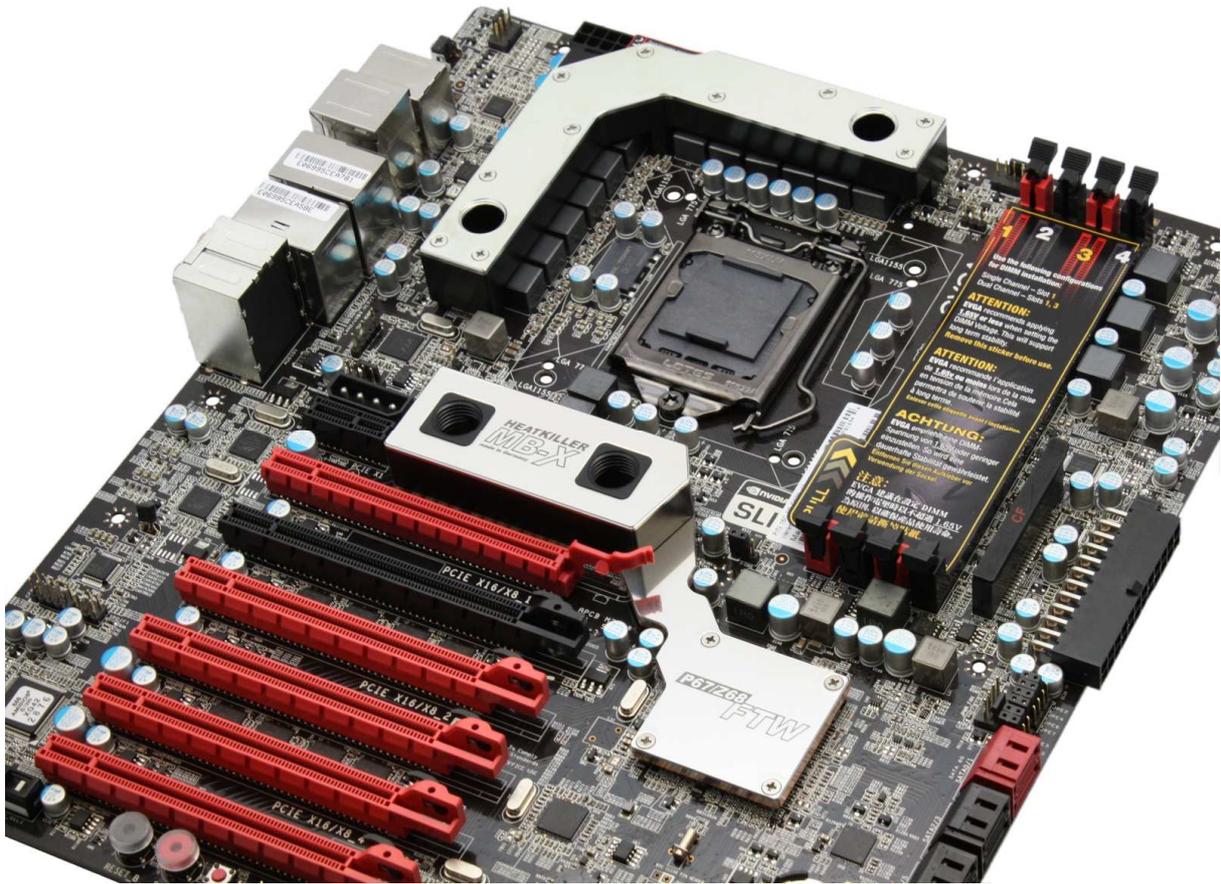


Figure 2: Mainboard with mounted coolers

HEATKILLER® are products by

WATERCOOL[®]
quality cooling equipment

Please send your criticism, praise or suggestions to the following address

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