

# Installation and mounting manual for EK-FB KIT ASUS M6F water block:

This product is intended for installation only by expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your equipment. EK Water Blocks assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our web site at <u>www.ekwb.com</u> for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.

Before you start using this product please follow these basic guidelines:

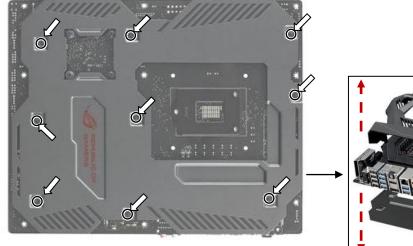
- 1. Please carefully read the manual before through before beginning with the installation process!
- 2. Please remove your motherboard from the computer to assure safest mounting process in order to prevent any possible damages to your CPU and/or motherboard's circuit board (PCB).
- 3. The EK High Flow and EK-PSC type fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured by the rubber o-ring gaskets.
- 4. The use of quality, market proved corrosion inhibiting coolants is always strongly recommended for any liquid cooling system.

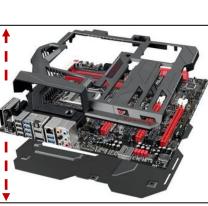
STEP 1: GENERAL INFORMATION Sample photo of ASUS Maximus VI FORMULA motherboard



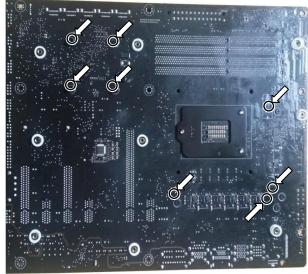
# **STEP 2: PREPARING YOUR MOTHERBOARD**

1. REMOVING THE FACTORY BACKPLATE AND THE PLASTIC COVER. Remove all encircled screws. There are 9 screws on the back of the motherboard that needs to be removed.





2. REMOVING STOCK COOLER. Remove all eight (8) encircled screws and <u>washers</u> on the back of the motherboard in order to remove the factory installed MOSFET and PCH heat sink solution.



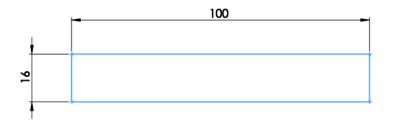
3. CLEANING THE PCB. Carefully detach the original stock cooler after removing **all** screws securing it to the board. Wipe off the remains (by using non–abrasive cloth or *q-tip*, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean. EKWB recommends the use of denatured alcohol for removing TIM leftovers.



4. APPLYING THERMAL COMPOUND. Apply thermal compound (not included): lightly coat the Intel Z87 (PCH) with electrically non-conductive thermal grease – for example Arctic Cooling MX-2 <sup>™</sup>, MX-4 <sup>™</sup> or GELID GC-Extreme <sup>™</sup> thermal grease. EKWB recommends to apply thermal grease in cross-form pattern for best performance (see sample picture).



5. CUTTING THERMAL PADS. Your block comes with one thermal pad which needs to be trimmed in order to fit the voltage regulation area (VRM/MOSFET) on the motherboard's circuit board. WARNING: DIMENSIONS ON PICTURES BELOW ARE SCALED!



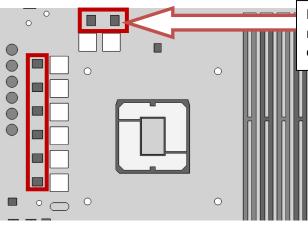
### Replacement thermal pads @ EKWB web shop:

Thermal PAD A 1mm - (100x16mm) [EAN: 3830046996626]

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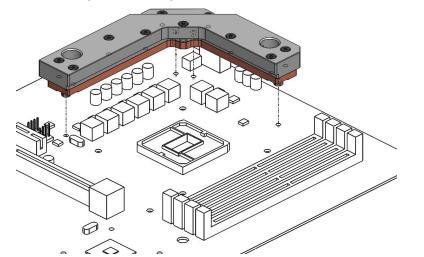
6. PLACING THERMAL PADS ON MOTHERBOARD. Place thermal pads you cut on PCB as shown on picture bellow (PLEASE REMOVE THE PROTECTIVE FOIL FROM BOTH SIDES OF THE THERMAL PADS PRIOR TO INSTALLATION). EK recommends using small drops of <u>electrically non-conductive</u> (for example: Arctic Cooling MX-2 <sup>TM</sup>, MX-4 <sup>TM</sup> or GELID GC-Extreme <sup>™</sup>) thermal grease on each phase regulator (that is being covered with thermal pad; see picture below) in order to even further improve the thermal performance of the EK-FB KIT ASUS M6F series water block.



Place 1mm thick thermal pads in larger strips over marked area and make sure all mosfet chips are covered.

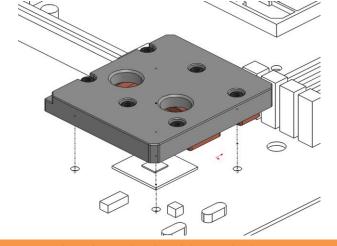
# **STEP 3: PREPARING YOUR WATER BLOCK**

1. PLACING MOSFET BLOCK ON THE MOTHERBOARD. Place the MOSFET water block with pre-installed 2.5mm standoffs kit gently to the motherboard or vice versa. Make sure that mounting holes are aligned.



Use four (4) M3x4 DIN7985 screw and four (4) PVC washers as shown in picture below.

2. PLACING SB BLOCK ON MOTHERBOARD. Place the SB part of the water block with preinstalled 2.5mm standoffs kit gently to the motherboard or vice versa. Make sure that mounting holes are aligned. Skip to STEP 4 on how to fasten the waterblock to the motherboard using the enclosed screws and washers.



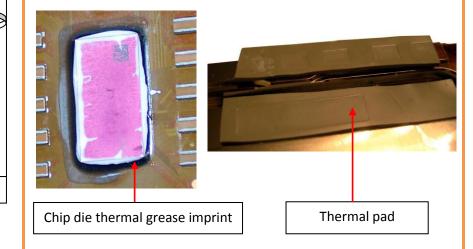
# **STEP 4: ATTACHING BLOCK TO MOTHERBOARD**

Prior to fastening the screws please make sure the mounting holes on the motherboard's circuit board are aligned with the water block.

Do not use excessive force when tightening the screws! 6 6 M3x4 DIN 7985 E **PVC** washer MOSFET PCH (SB)

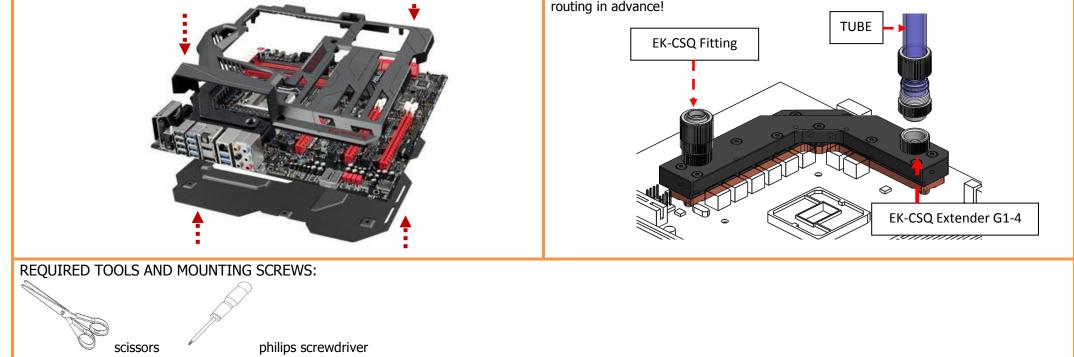
**STEP 5: CHECKING FOR CONTACTS** 

Temporarily remove the water block to check for uniform surface contact between the block and the components. Then repeat steps 3 and 4 to reattach the block applying more or less pressure to the areas where you have found it necessary.



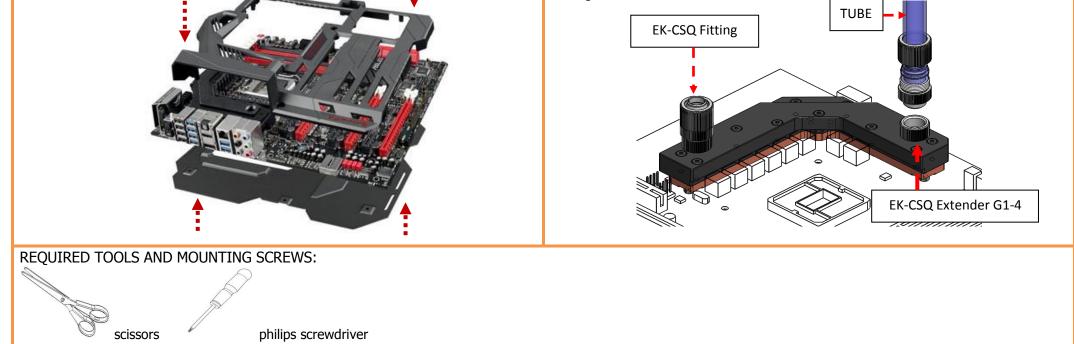
# **6. ATTACHING THE FACTORY BACKPLATE AND THE PLASTIC COVER**

Place the original PLASTIC COVER and the BACKPLATE to the motherboard as shown in picture below. Use nine (9) screws which have been removed in STEP 2. Do not use excessive force when tightening the screws!



## 7. POSITIONING FITTINGS AND CONNECTING TO WATER CIRCUIT

Attach the liquid cooling tubes and connect the water-block(s) into the cooling circuit. EKWB recommends using EK-CSQ compression fittings with the EK-FB KIT ASUS M6F series water block. You can use any opening as an inlet/outlet port. Plan your tubing routing in advance!



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