



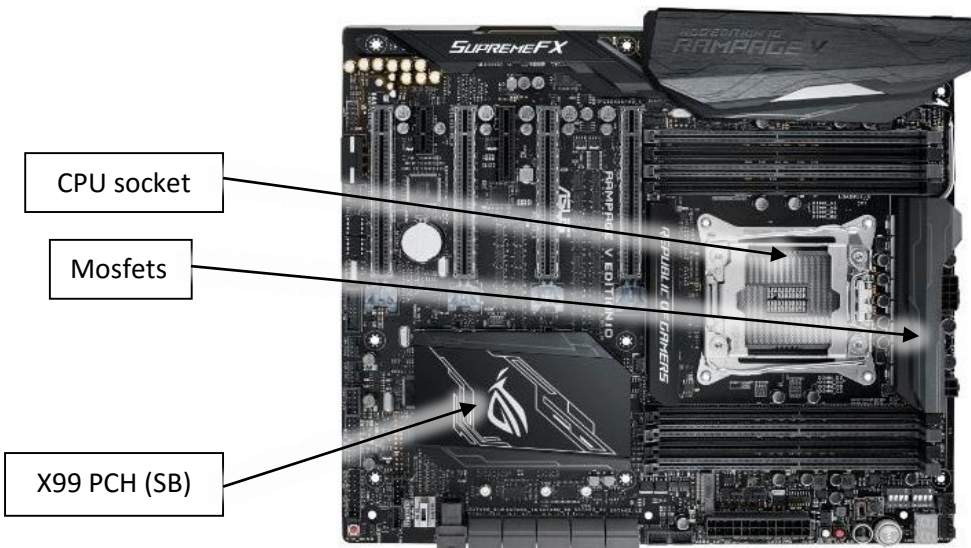
Installation and mounting manual for **EK-FB KIT ASUS R5-E10** water block:

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 www.ekwb.com 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-ACF 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 Rampage V Edition 10 motherboard

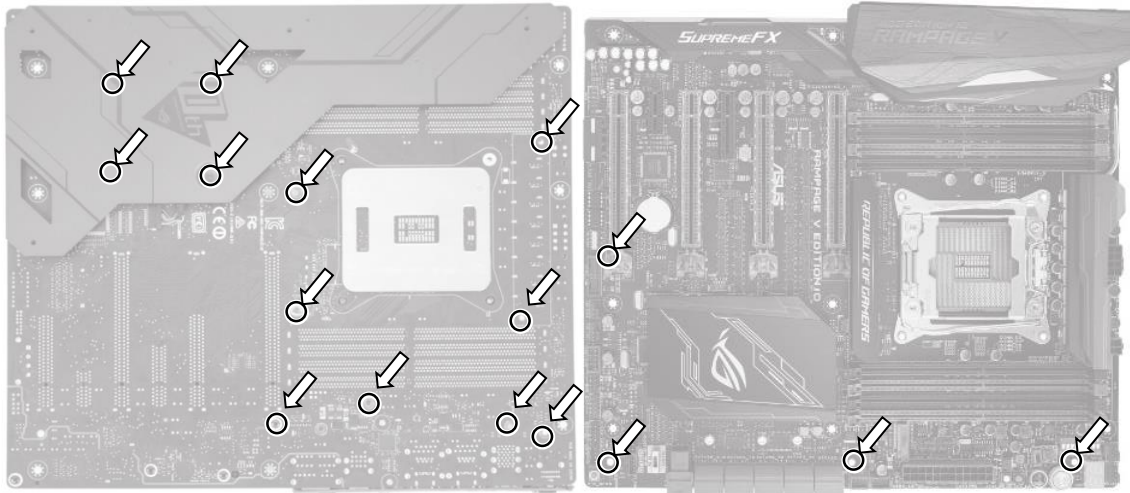


BAG CONTENT: Bag content is universal for all water blocks, you may not need all screws.

M3x8 DIN7991	M3x5 DIN7985	M2.5x5 AX1	M2,5x7 AX1	M3 PVC washer
3pcs	7pcs	7pcs	3pcs	7pcs
M3 adhesive PVC washer	M2.5 PVC washer	Thermal grease	2mm Allen key	
7pcs	7pcs	1pc	1pc	
Replacement mounting mechanism: FB KIT - type A (EAN: 3831109872284)				

STEP 2: PREPARING YOUR MOTHERBOARD

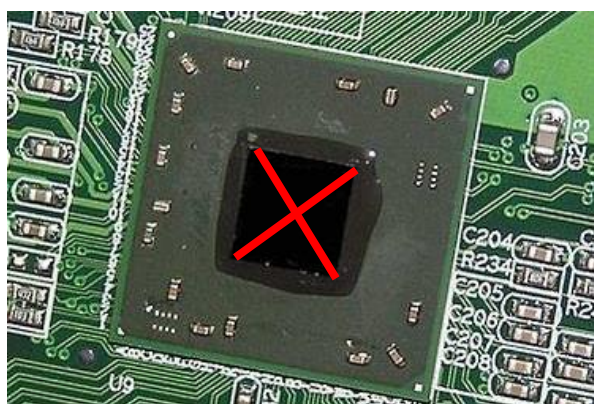
1. REMOVING STOCK COOLER. Remove all encircled screws. There are 4 screws on the front (picture on the right) of the motherboard that needs to be removed first in order to remove the factory installed backplate. You must also remove all 12 screws from the back side (picture on the left) in order to remove SB/MOSFET heat pipe cooling solution. Be careful to disconnect all the electrical connection as well.



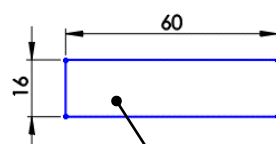
2. CLEANING THE PCB. Carefully detach the original stock cooler after removing **all** screws securing it to the board. Wipe off the remains (by using non-abrasive cloth or *qtip*, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean.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



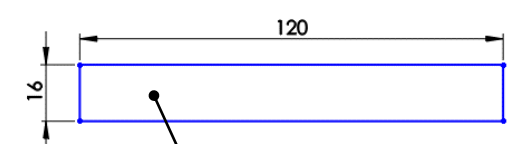
3. APPLYING THERMAL COMPOUND. Apply thermal compound: lightly coat the *Intel X99 PCH (SB)* with electrically non-conductive thermal grease – EK-TIM Ectotherm (enclosed) EKWB recommends to apply thermal grease in cross form for best performance (see sample picture).



4. CUTTING THERMAL PADS. Your block comes with thermal pads which needs to be trimmed in order to fit the voltage regulation area (VRM/MOSFET) and few other elements on the motherboard's circuit board. **WARNING: DIMENSIONS ON PICTURES BELOW ARE SCALED.**



3: Thermal pad F – 2mm (for circuit board)

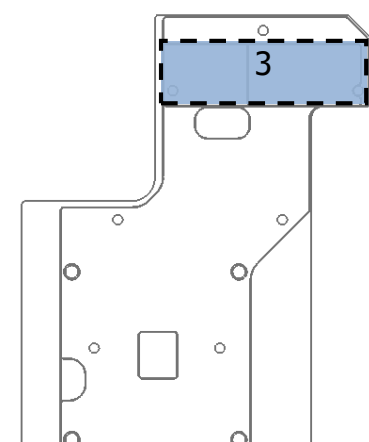
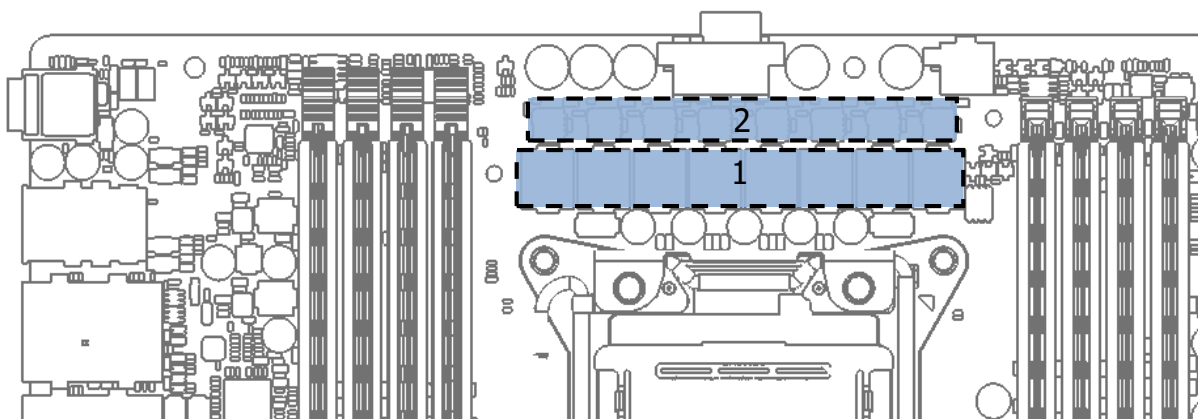


1: Thermal pad F – 0.5mm (for VRM inductor coils)
2: Thermal pad F – 1mm (for MOSFETS)

Replacement thermal pads @EKWB webshop:

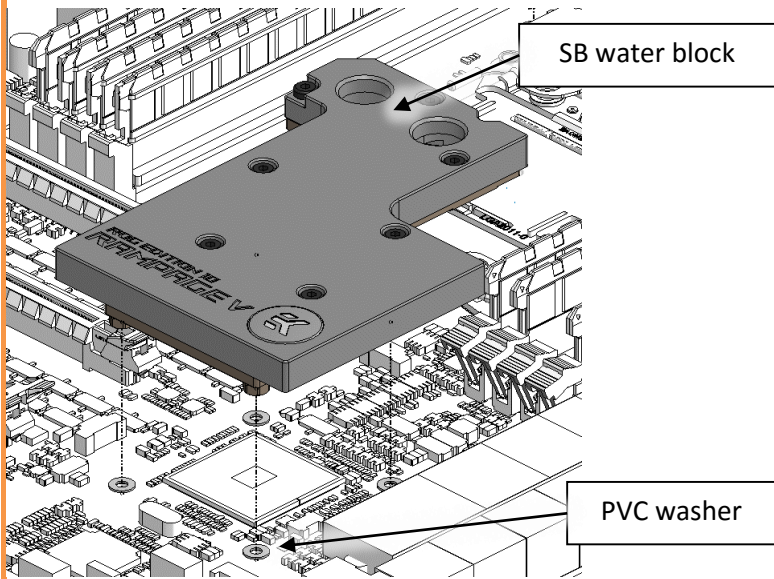
- Thermal PAD F 0,5mm - (120x16mm) (EAN: 3830046996725)
- Thermal PAD F 1,0mm - (120x16mm) (EAN: 3830046996732)
- Thermal PAD F 2,0mm - (120x16mm) (EAN: 3830046996756)

5. PLACING THERMAL PADS ON MOTHERBOARD. Place thermal pads you cut on PCB as shown on picture below (PLEASE REMOVE THE PROTECTIVE FOIL FROM BOTH SIDES OF THE THERMAL PADS PRIOR TO INSTALLATION). EK recommends using small drops of electrically non-conductive (for example: Arctic Cooling MX-2™ or MX-4™) 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 R5-E10 series water block.



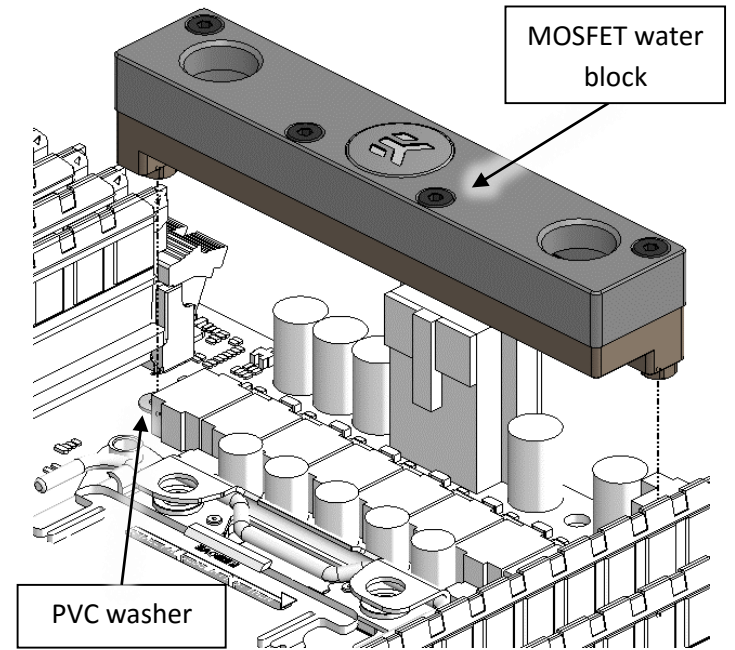
STEP 3: PREPARING YOUR WATER BLOCK

1. **PLACING SB WATER 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 water block to the motherboard using the enclosed screws and washers.



If the washers are not stock-glued on the PCB you must use enclosed self-adhesive PVC washers. Be careful not to double the washers!!!

2. **PLACING MOSFET BLOCK ON MOTHERBOARD.** Place the water block gently to the motherboard or vice versa. Make sure that mounting holes are aligned.



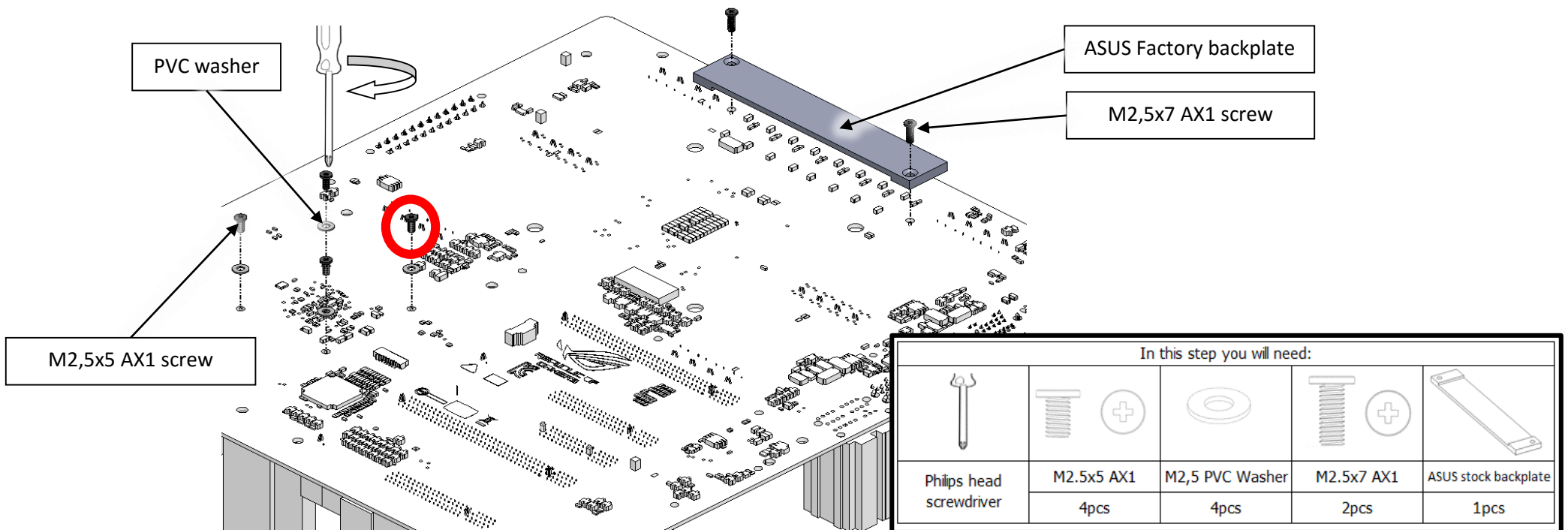
STEP 4: ATTACHING BLOCK TO MOTHERBOARD

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

A) **SB block:** Use four M2,5x5 AX1 screws and washers. Tighten the screws, beginning near the south bridge, and continue evenly outwards. Do not use excessive force when tightening the screws! If you wish to install factory backplate you should remove the encircled screw and replace it with one M2,5x7 AX1 screw. Do not use excessive force when tightening the screws!

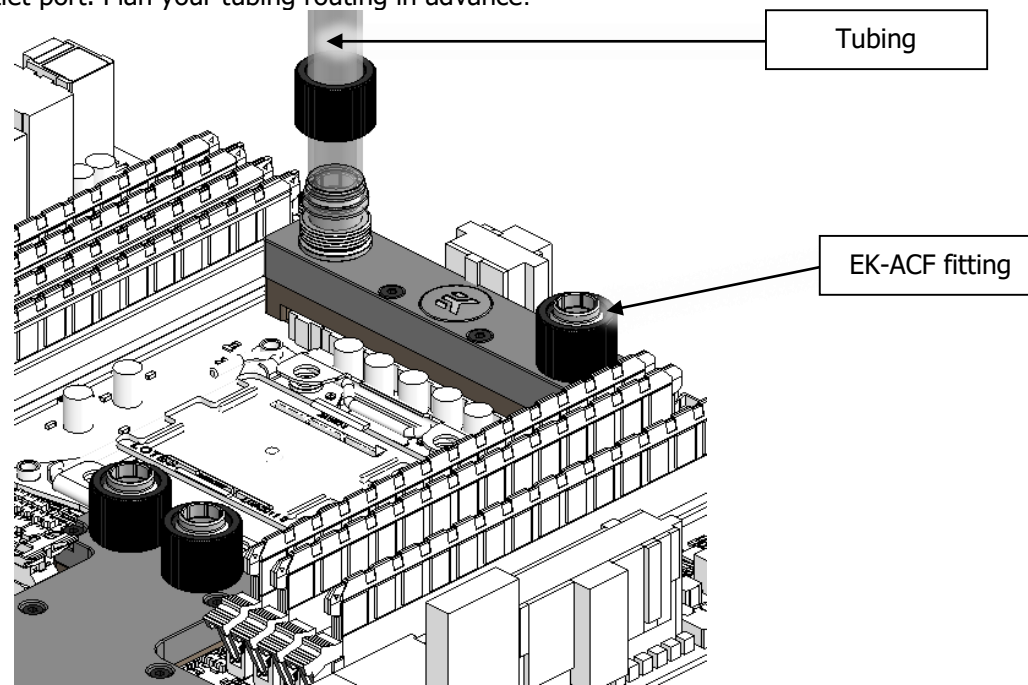
B) **MOSFET block:** Use ASUS factory ("stock") backplate and two M2,5x7 AX1 screws. Use a Phillips screwdriver to tighten the screws. Do not use excessive force when tightening the screws!

Use the enclosed screws and washers as shown in picture below:



6. 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-ACF compression fittings with the EK-FB KIT ASUS R5-E10 series water block. You can use any opening as an inlet/outlet port. Plan your tubing routing in advance!



REQUIRED TOOLS:

