

ALPHA

PAL8150 Installation Guide

Last revised : Dec. 2003
X001ZF1R-A

Model *PAL8150*

For Opteron , Athlon64

Please verify that all parts are contained in the package per the following matrix.

PARTS	QTY	MODEL		
		PAL8150 T	PAL8150 M81	PAL8150 M82
HEAT SINK	1	○	○	○
INTAKE COVER	1	○	○	○
SCREW, M3 x 70 (to attach a 15mm thick fan)	4	○	○	○
SCREW, M3 x 80 (to attach a 25mm thick fan)	4	○	○	○
PLANE WASHER (to attach a fan)	4	○	○	○
SHOULDER SCREW 6-32UNC	2	○	○	○
SPRING	2	○	○	○
FAN (80mm sq. x 25)	1		○	
FAN (80mm sq. x 15)	1			○
TERMAL GREASE YG6260-5	1		○	○

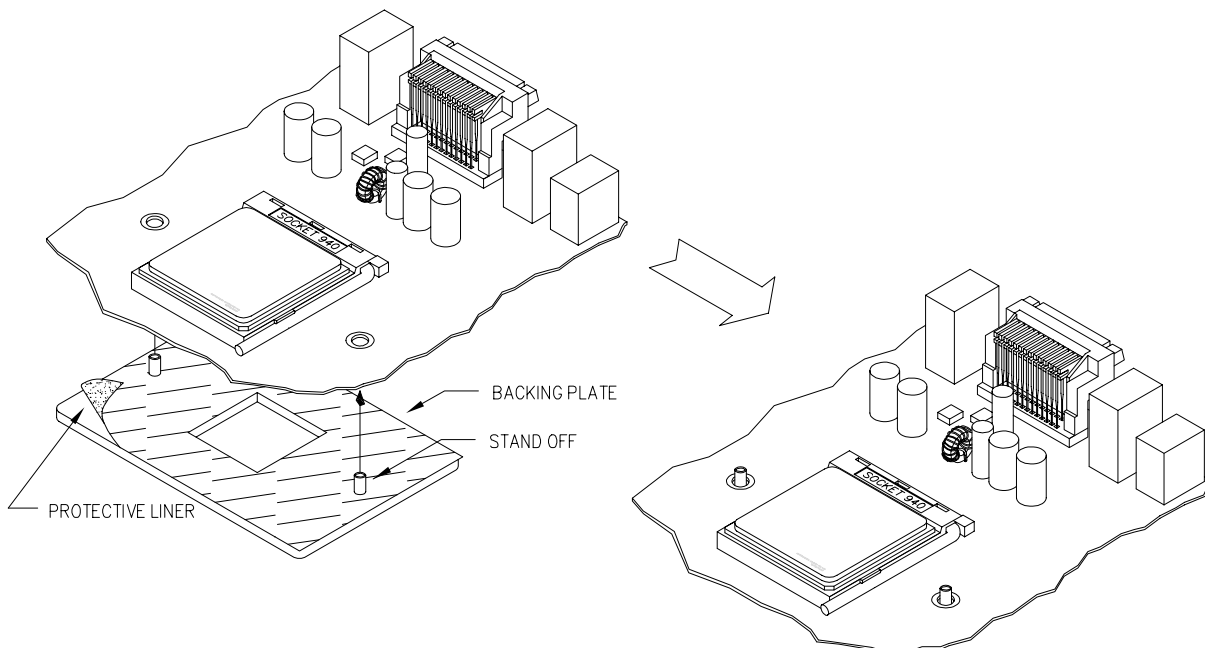
STEP 1 BACKING PLATE INFORMATION AND INSTALLATION

Most Opteron and Athlon 64 , 64FX Socket 940 and 754 Motherboards will come with a compatible metal backing plate utilizing 6-32 thread metal standoffs. Some boards may not come with a backing plate or may come with a plastic backing plate utilizing plastic retention pins. In these cases, the optional Alpha backing plate will need to be purchased.

If your board has a pre-installed backing plate and retention frame that conforms to the AMD Thermal Design Guide, the optional Alpha backing plate is not required. Removing the motherboard from the case is also not required. Simply remove the retention frame by removing the two screws attaching it to the backing plate. Set the retention frame and screws aside or discard. At this point, proceed to heat sink assembly and installation.

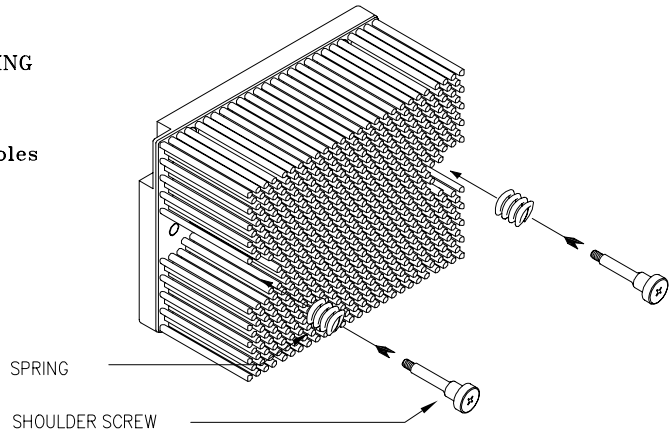
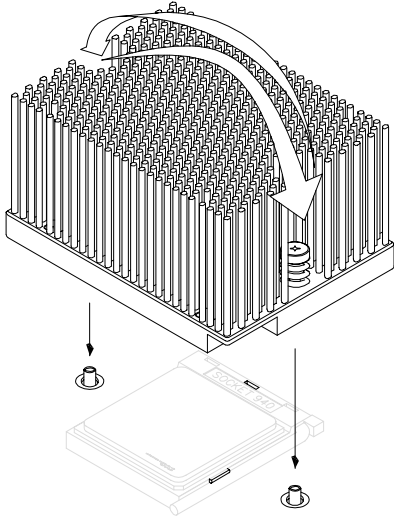
If your board did not come with a pre-installed backing plate, or if it came with a backing plate that does not conform to the AMD Thermal Design Guide, (for example all plastic), then the optional Alpha backing is required.

The motherboard will need to be removed from the case in order to remove/install the backing plate. If present, first remove any non AMD conforming backing plate and retention frame. Next, remove the protective liner from the backing plate Mylar insulator to expose the adhesive. Carefully install the backing plate to the back side of the motherboard, making sure the metal standoffs are centered over the two holes in the motherboard. Apply light pressure to ensure that the adhesive on the Mylar insulator forms a good bond with the motherboard. At this point, reinstall the motherboard inside the computer case and proceed to the heat sink assembly and installation.



STEP 2 ASSEMBLE AND INSTALL SHOULDER SCREW/SPRING

Assemble the shoulder screws and springs per the right hand assembly drawing. Insert the assembled units through the two holes in the heat sink. It may help to hold the heat sink on its side while installing the screws.



STEP 3 INSTALL THE HEAT SINK

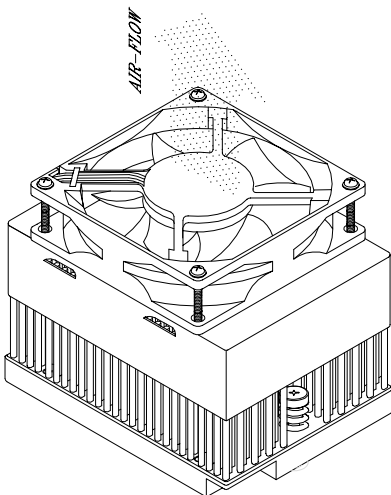
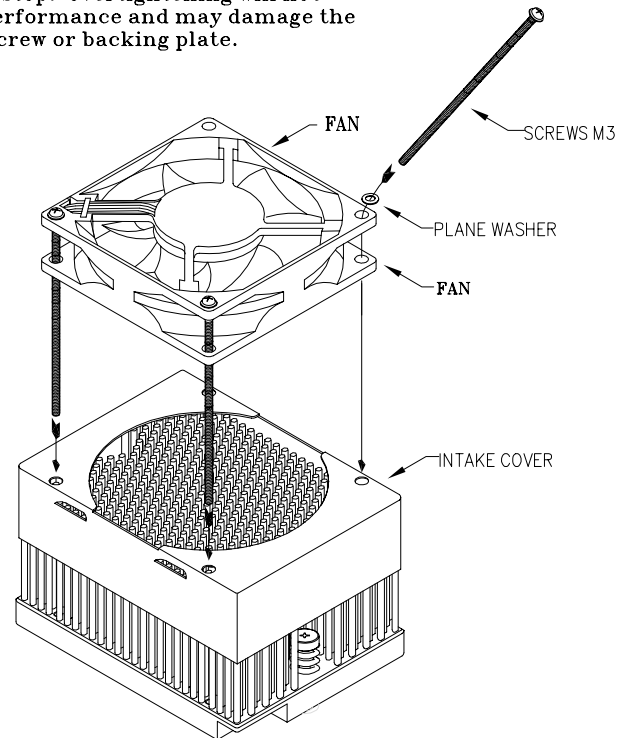
Apply a thin layer of thermal grease to the top of the processor. Carefully line up the shoulder screws with the two standoffs and gently place the heat sink on top of the processor.

Begin to tighten the shoulder screws. Only tighten the screws a few turns each time, alternating between screws. Once the shoulder screw's stop makes contact with the standoff the shoulder screws will no longer turn. At this point, stop. Overtightening will not improve performance and may damage the shoulder screw or backing plate.

STEP 4 HEAT SINK ASSEMBLY

Peel off the white sheet on the intake cover. This sheet protects the intake cover from scratches during manufacturing and shipment. Place the intake cover over the heat sink per the right hand side figure.

Use the M3X70 screws to attach a 15mm fan. Use the M3X80 screws to attach a 25mm fan. The screws must go through the fan and intake cover and will thread into the heat sink base. Do not overtighten the fan screws or damage could occur to the fan or intake cover.



STEP 5 FINAL ASSEMBLY AND INSPECTION

If not already done, reinstall the MB inside the case. Attach the fan connector to the appropriate MB header. The PAL8150 should now be fully assembled.

Inspect the heat sink to ensure that it is sitting level relative to the processor and socket. Make sure that the heat sink is not interfering with any part of the MB or case.

information subject to change without notice.