

ALPHA

PAL153 Installation Guide

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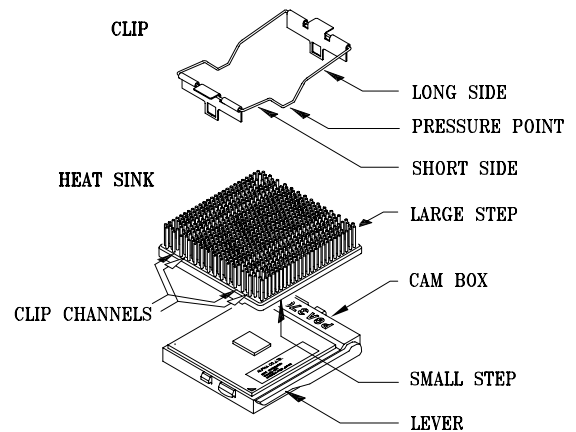
Please verify that all parts are contained in the package per the following matrix.

PARTS	QTY	MODEL	
		PAL153T	PAL153U-M63
HEAT SINK	1	○	○
CLIP CL57L1	1	○	○
SCREW , WASHER (to attach fan)	4	○	○
FAN (60sq.) 60x10	1		○
THERMAL GREASE YG6260-5	1		○
PAD	1	○	○

**STEP 1** Make sure the heat sink does not interfere with socket lever etc... before trying to assemble the heat sink unit. Note proper location of the steps in the heat sink base. The small step goes over the lever arm. The large step goes over the Socket cam box.

Be sure to insert the clip in the direction shown in the right-hand side figure. Please note that the clip is asymmetrical, with an off-center pressure point. This pressure point must go directly over the CPU die. The long side of the clip goes over the side of the heat sink with large step machined in the base. This side of the clip then will attach to the cam box side of the CPU socket.

Also note that there are two sets of channels for the clip. This allows the clip to be offset approximately 3mm to either side. This will allow the heat sink to fit on motherboards with components that would otherwise interfere with the heat sink. If the heat sink is interfering with motherboard components, try installing the clip in the other set of channels.



**STEP 2** Assemble as shown in the right-hand side figure.

**STEP 3** The base is coated with oil that prevents oxidation. Remove this coating with a clean cloth. To ensure proper bonding of PADS (see below), the use of a mild solvent, such as isopropyl alcohol or acetone (nail polish remover), would be ideal.

**STEP 4**

- For the attachment to FC-PGA. Apply PADS to the four points on the heat sink base shown in the right-hand side figure. (PADS which remain are spares.)
- For the attachment to Athlon, Duron and PPGA chips. Do not use PADS.

**STEP 5** Apply thermal grease to heat sink and CPU thinly and evenly.

NOTE : Applying excessive thermal grease causes decrease in thermal performance. To avoid possible board damage, do not use excessive force. Make sure the clip is installed correctly on socket tab.

**STEP 6** Final assembly inspection:  
Prior to powering up the CPU, visually inspect the heatsink to ensure it is sitting level on the CPU. Ensure that the heat sink base is only making contact with the CPU die, not the socket cam box or lever arm.

