

ALPHA

PAL8942 / S-PAL8952 Installation Guide

Last revised : Jan. 2004

X001ZF1F-B

Model *PAL8942, S-PAL8952*
For Pentium 4 (mPGA478)

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

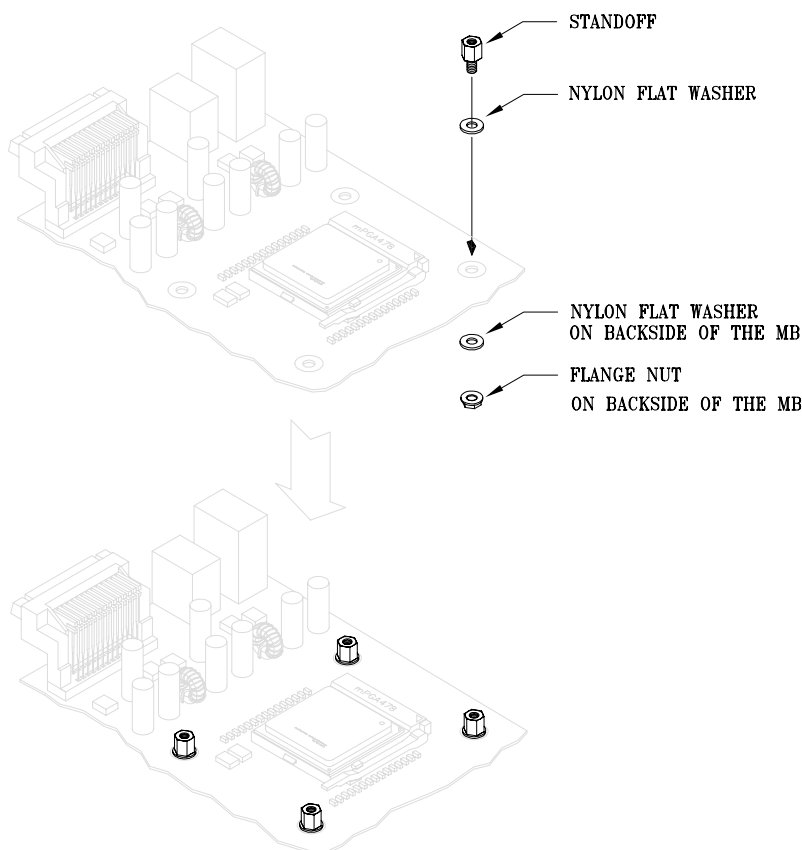
| PARTS | | QTY | MODEL | | | | | |
|---------------------|----------------------------------|-----|---------|-----|-----|-----------|-----|-----|
| | | | PAL8942 | | | S-PAL8952 | | |
| | | | T | M81 | M82 | T | M81 | M82 |
| HEAT SINK | (PAL8942A) | 1 | ○ | ○ | ○ | | | |
| | (S-PAL8952A) | 1 | | | | ○ | ○ | ○ |
| INTAKE COVER | (CT8917) | 1 | ○ | ○ | ○ | | | |
| | (CT8925) | 1 | | | | ○ | ○ | ○ |
| SCREW , M3 x 60 | (for PAL8942 : 15mm thick fan) | 4 | ○ | ○ | ○ | | | |
| SCREW , M3 x 60 | (for PAL8942 : 25mm thick fan) | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| SCREW , M3 x 80 | (for S-PAL8952 : 15mm thick fan) | 4 | | | | ○ | ○ | ○ |
| SCREW , M3 x 80 | (for S-PAL8952 : 25mm thick fan) | 4 | | | | ○ | ○ | ○ |
| PLANE WASHER | | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| SCREW , M3 x 35 | | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| SPRING , OD 6 x 27 | | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| NYLON , FLAT WASHER | | 8 | ○ | ○ | ○ | ○ | ○ | ○ |
| STANDOFF | | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| FLANGE NUT | | 4 | ○ | ○ | ○ | ○ | ○ | ○ |
| FAN | (80sq.) 80x25 | 1 | | ○ | | | ○ | |
| FAN | (80sq.) 80x15 | 1 | | | ○ | | | ○ |
| THERMAL GREASE | YG6260-5 | 1 | | ○ | ○ | | ○ | ○ |

STEP 1 Uninstall Mother Board(MB).

The MB must be uninstalled from the case prior to assembly of the PAL8942 (or S-PAL8952).

STEP 2 Install Standoffs in MB.

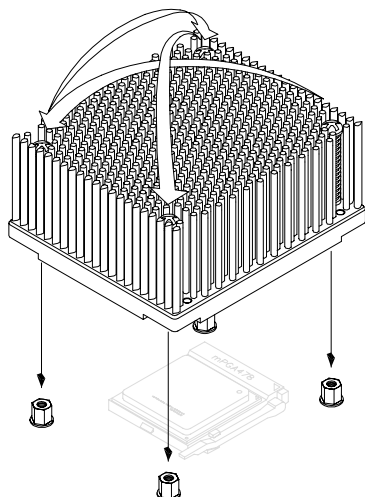
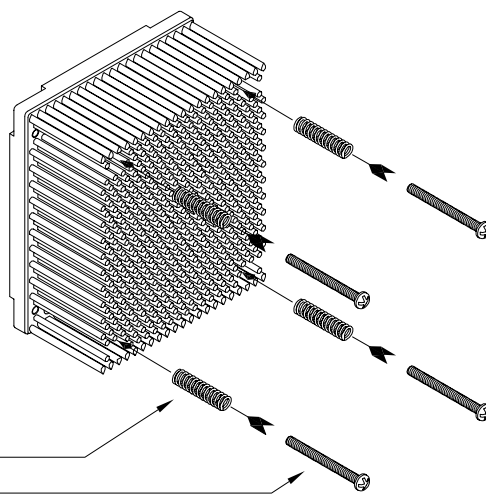
Install the four nylon standoff washers over the four holes in the MB. Insert the Standoffs through the nylon washer and MB. Secure the standoffs with flange-nut/nylon washer on backside of the MB. Keep the standoff and washer centered over the MB holes. To avoid possible board damage, do not use excessive force when tightening the flange-nuts .



STEP 3 Assemble and install Spring Screws.

Place the springs over the spring screws. Insert the assembled spring screws through the 4 holes in the heat sink. It may help to hold the heat sink on its side.

Notes : The heat sink in the following figures is the PAL8942.



STEP 4 Install Heat Sink.

Apply a thin layer of thermal grease on the processor. Gently place heat sink on top of processor. Line up the spring screws with the standoffs.

Begin to tighten the screws in an alternating crisscross pattern. Only tighten each screw a few turns each time and continue the crisscross pattern. Once the screws bottom, stop. The springs are now applying the specified load. Over-tightening the screws will NOT improve performance and may damage your MB.

The heat sink should now be securely installed in the MB. If you wish, you can reinstall the MB in the case at this time or complete the heat sink assembly.

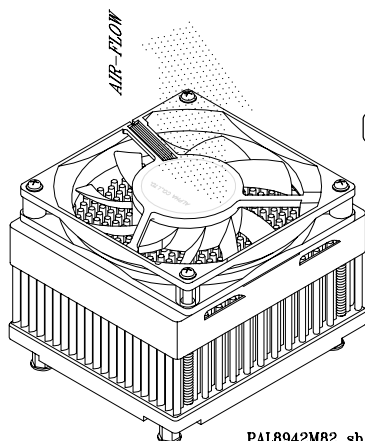
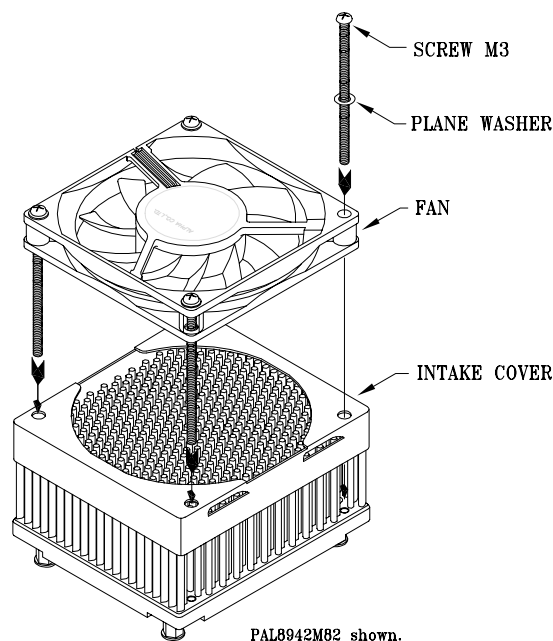
STEP 5 Heat Sink Assembly.

Peel off the white sheet from the intake cover. This cover prevents damage during manufacturing. Place the intake-cover over the heat sink, as shown in the right-hand side figure.

Insert the screws through the fan holes. (Please refer to PARTS LIST to determine the correct screw to use with your particular heat sink / fan combination.)

Place the fan on top of the intake cover, and tighten the screws into the threaded holes in the heat sink base.

When using a fan with the double flange feature, such as the M81, use care when tightening the fan screws. Do not use excessive force, as this can cause the flange to deform, damaging the fan.



STEP 6 Final assembly and inspection:

Connect fan cable to the motherboard header. The PAL8942 (or S-PAL8952) should now be fully assembled.

Reinstall the MB in the case if this was not already done. Inspect to ensure that the heat sink is sitting level relative to the processor and socket. Inspect final assembly to ensure that the heat sink assembly is not interfering with any part of the MB or case.

information subject to change without notice.

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