

ALPHA

S-PAL8045/8055 Installation Guide

Last revised : May. 2004
X001ZF1Y

Do not require mounting holes in motherboard. Heat sink mounts to a custom bracket (FLG462) attached directly to the socket. If any components interfere with the bracket, the bracket must not be used. Please read this installation guide carefully and access to our web site for more information.

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

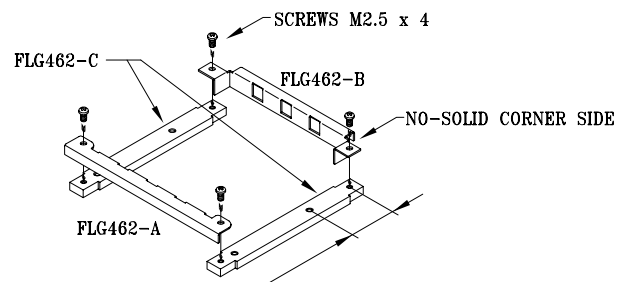
PARTS	QTY	MODEL			
		S-PAL8045		S-PAL8055	
		F	FU	F	FU
HEAT SINK (S-PAL8045)	1	○	○		
(S-PAL8055)	1			○	○
BRACKET FLG462-A	1	○	○	○	○
BRACKET FLG462-B	1	○	○	○	○
BRACKET FLG462-C	2	○	○	○	○
SCREW M2.5× 4 (to attach FLG462)	4	○	○	○	○
INTAKE COVER (CT80S)	1	○	○		
(CT80L)	1			○	○
SCREW M3× 30 (to attach fan)	2	○	○	○	○
SCREW M3× 70 (to attach fan, for S-PAL8045)	2	○	○	○	○
SCREW M3× 80 (to attach fan, for S-PAL8055)	2	○	○	○	○
WASHER	4	○	○	○	○
HEXAGONAL NUT	2	○	○	○	○
SHOULDER SCREW SS + P3× 33.8	4	○	○	○	○
SPRING OD 6× 25	4	○	○	○	○
CLIP CLPA80S (for S-PAL8045)	1	○	○		
CLIP CLPA80L (for S-PAL8055)	1			○	○
FAN (80 mm sq.× 25.4 mm)	1		○		○
THERMAL GREASE YG6260-5	1		○		○

STEP 1 BEFORE INSTALLING FLG462 TO SOCKET

Ensure that there are no components surrounding the socket that will interfere with the FLG462 bracket. Refer to the figure in STEP 3. If any components interfere with the bracket, the bracket must not be used. If the 4 mounting holes surrounding the socket are present, the MTGH-SPL80S hardware kit contains all the hardware is required to mount the heat sink directly to the board with standoffs. Before installing the heat sink, turn off the power. The MB must be uninstalled from the case prior to assembly of S-PAL8045/8055 if the MTGH-SPL80S hardware kit is used for installation. The MTGH-SPL80S hardware kit is not included in this package, but is available as an accessory.

STEP 2 ASSEMBLY OF FLG462

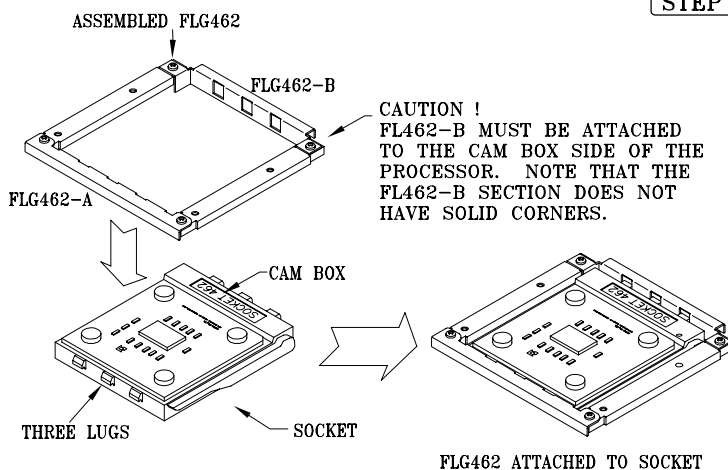
Assemble the FLG462 sections A, B and C as shown in the right hand side figure. Be careful to assemble FLG462-C in the right orientation relative to the hole position. If assembled incorrectly, the heat sink will not sit level relative to the processor and socket, causing serious damage. Also, do not completely tighten the 4 M2.5X4 screws at this time. The FLG462 bracket needs to be loosely assembled at this moment in order to attach it to the socket.



NOTE: FLG462-C HAS A CORRECT ASSEMBLED ORIENTATION. THE END WITH A WIDER SPACE BETWEEN THE TWO THREADED HOLES MUST BE ATTACHED TO THE FLG462-B SECTION OF THE BRACKET.

STEP 3 INSTALL FLG462 TO SOCKET

Carefully attach the FLG462 bracket to the processor socket. To prevent any damage to MB components, ensure that there is no interference with the bracket. Hook the three holes of FLG462-A and B to the three lugs on each end of the socket. The FLG462-B must be hooked to the side with the cam box. Refer to the left hand side figure. Square the FLG462 by eye and completely tighten the M2.5X4 screws. The FLG462 bracket should now be tightly assembled. Note, however, that there will be some play, allowing the FLG462 bracket to move slightly relative to the socket.

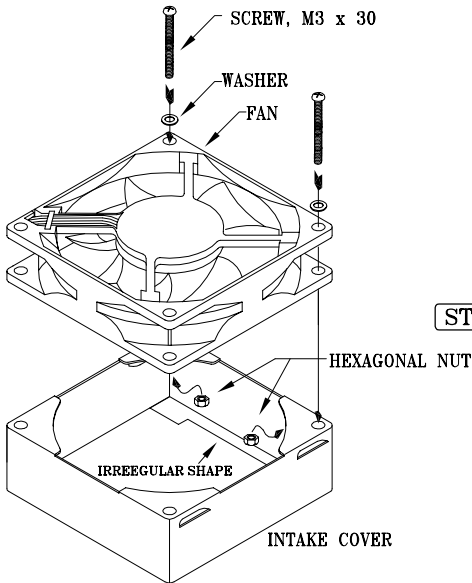
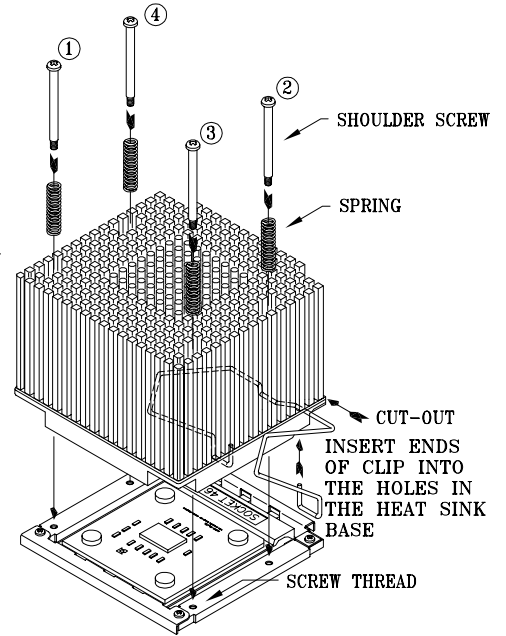


- If there are any components that interfere with FLG462-C, the FLG462 should not be used. However, if the components are less than 4 mm in height, the FLG462 can be installed to the MB socket. Place each FLG462 section A, B and C around the socket separately, and then completely tighten the M2.5 screws.

STEP 4 INSTALL HEAT SINK

Apply a thin layer of thermal grease on the processor. Preinstall both ends of the clip into the holes in the side of the heat sink with the cut-outs in the base. Refer to the right hand side figure. Set shoulder screws and springs into the #1 and #2 holes of the heat sink. Gently, place the heat sink on top of the processor. Ensure that the side of heat sink with the irregular shaped cut-outs goes over socket cam box. Line up the #1 and #2 spring screws with the holes of FLG462. Look through the #3 and #4 holes to help align the heat sink with the FLG462 bracket. Begin to tighten #1 and #2 screws in an alternating pattern. Only tighten each screw a few turns each time and insert the other spring screws, #3 and #4. Continue to tighten all spring screws in a crisscross pattern. Once the screws bottom, stop.

The springs are now applying the specified load. Over-tightening the screws will accomplish nothing. The heat sink should now be securely attached to the MB. The FLG462 should be securing the heat sink and pulled tight against the socket lugs. If you wish, you can reinstall the MB in the case at this time or complete the heat sink assembly.

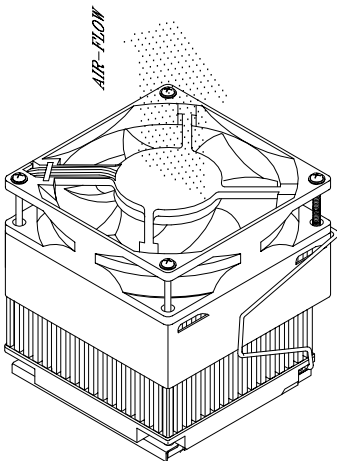
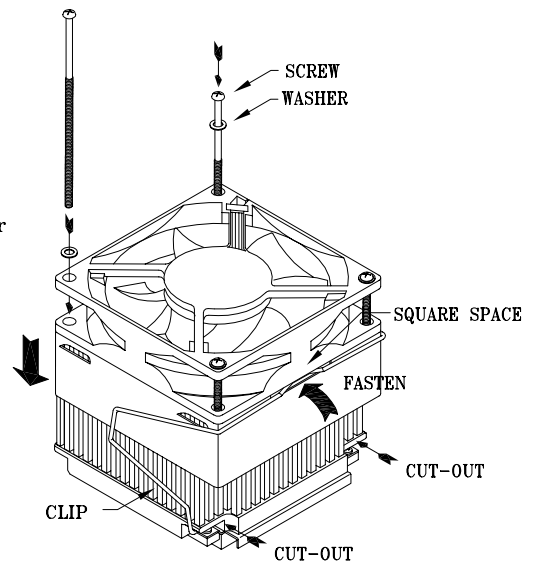


STEP 5 ASSEMBLY OF FAN AND INTAKE COVER

Refer to the left hand side figure. The fan must be attached to the intake cover before attachment to the heat sink. First, peel off the white protective film from the intake cover. The M3X30 screws must go through the fan and the irregular cut-out side of the intake cover and are secured with a hexagonal nut.

STEP 6 ASSEMBLY OF FAN, INTAKE COVER AND HEATSINK

Place the assembled intake cover over the heatsink per the right hand side figure. Use the M3X70 screws for S-PAL8045 to attach a 25mm fan. Use the M3X80 screws for S-PAL8055 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. Finally, fasten the convex end of the clip into the square space in the intake cover.



STEP 7 FINAL ASSEMBLY AND INSPECTION

Install fan connector to the appropriate motherboard header. The S-PAL8045/8055 should now be fully assembled. Inspect to ensure that the heat sink is not interfering with any components on the MB. Reinstall the MB into 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 case.

information subject to change without notice.