

ASUS® Xeon Installation Procedure

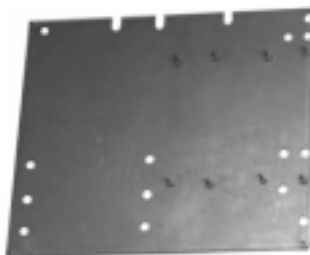
Central Processing Unit (CPU)

This motherboard provides two Single Edge Contact (SEC) Slot 2 connectors for either one or two Intel® Xeon™ processors packaged in an SEC cartridge. When only one processor is used, the other Slot 2 connector must be terminated with the provided front side bus termination module.

NOTE: The pictures in the following pages will have the same item numbers next to them for your reference. The following pictures are for reference only and are not to size. The design and color of your items may be slightly different.

You should check to see that you have the following items with your motherboard:

(Item 1) Metal Baseboard x 1



(Item 6) Retention Mechanism Brace Bar x 2



(Item 2) Rubber Pad x 1



(Item 7) Front Side Bus Termination Module



(Item 3) Retention Mechanism x 2



(Item 8) Retention Mechanism Cap x 2



NOTE: For the retention mechanism and lock bar, there is a left and a right side. The left side has a single dot and the right side has two dots (when holding the motherboard with the ATX connectors to the left).

(Item 4) Captive Nut x 15 (in bag)



(Item 5) Cartridge Lifter x 4



(Item 9) Retention Mechanism Support Frame x 2

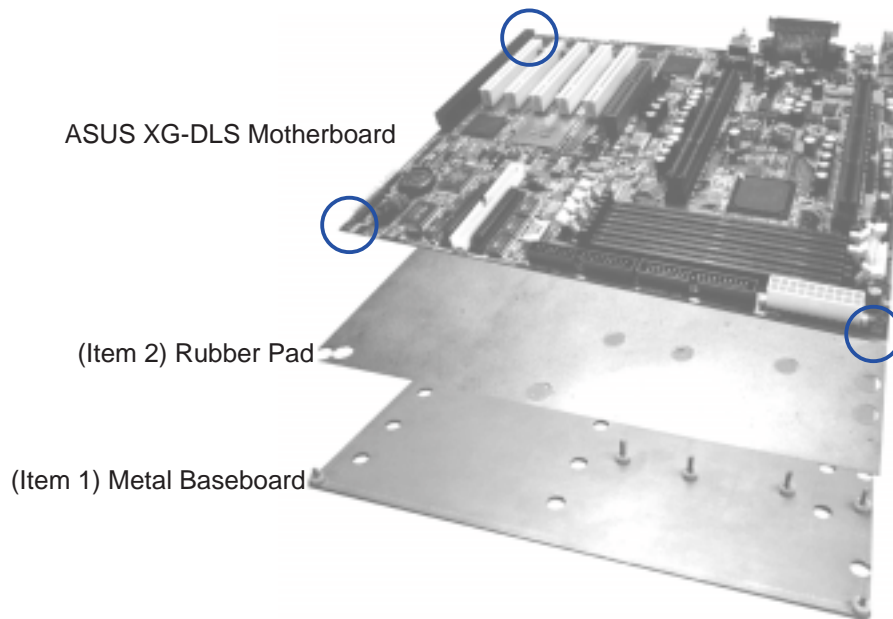


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Xeon Processor Installation

Step 1: Install the Baseboard

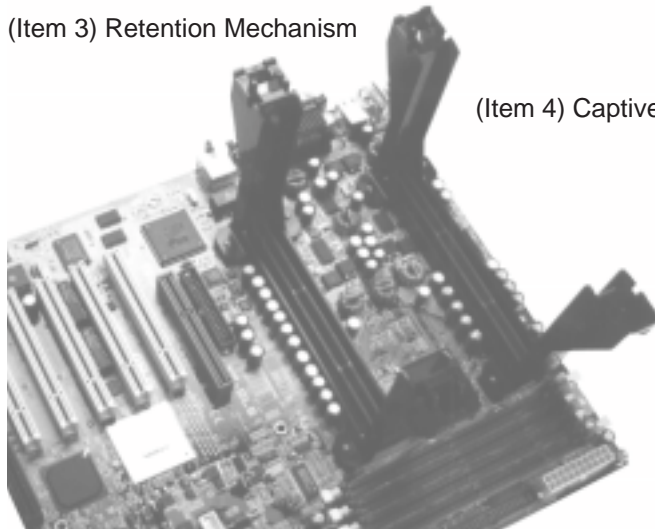
A metal baseboard is required to add stability to the motherboard. A rubber pad is placed between the metal board and motherboard to provide insulation to prevent shorting. Align the rubber pad over the metal baseboard so that the holes match. Align the ASUS XG-DLS motherboard over the rubber pad and metal baseboard so that the screws match up with the motherboard's screw holes. Place and tighten three captive nuts in the corner locations circled.



Step 2: Install Retention Mechanisms

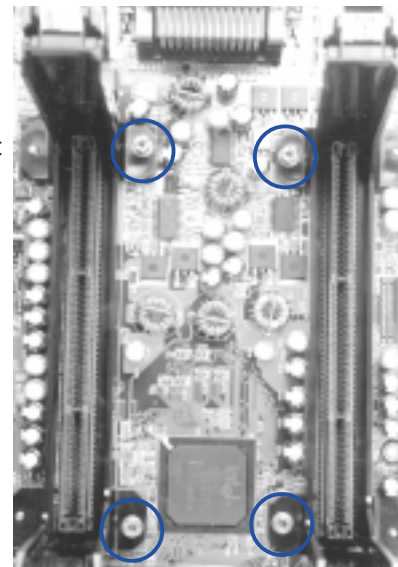
Place the retention mechanisms' holes over the screws and the Slot2. Screw four captive nuts onto the screws as circled in the picture on the right. Do not place the other captive nuts yet.

(Item 3) Retention Mechanism



Two retention mechanisms installed

(Item 4) Captive Nut



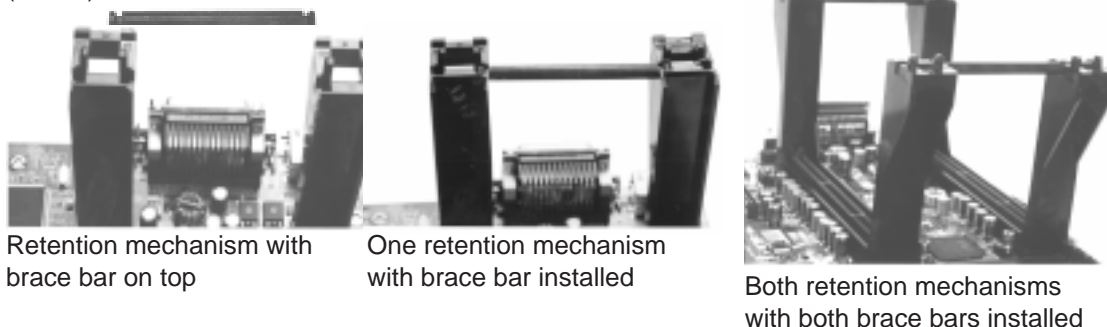
Four installed captive nuts

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Step 3: Install the Retention Mechanism Brace Bars

Place the retention mechanism brace bar into the groove on the top of the retention mechanism as shown in the picture below. These pictures are views of the motherboard and retention mechanism with the ATX connectors away from yourself.

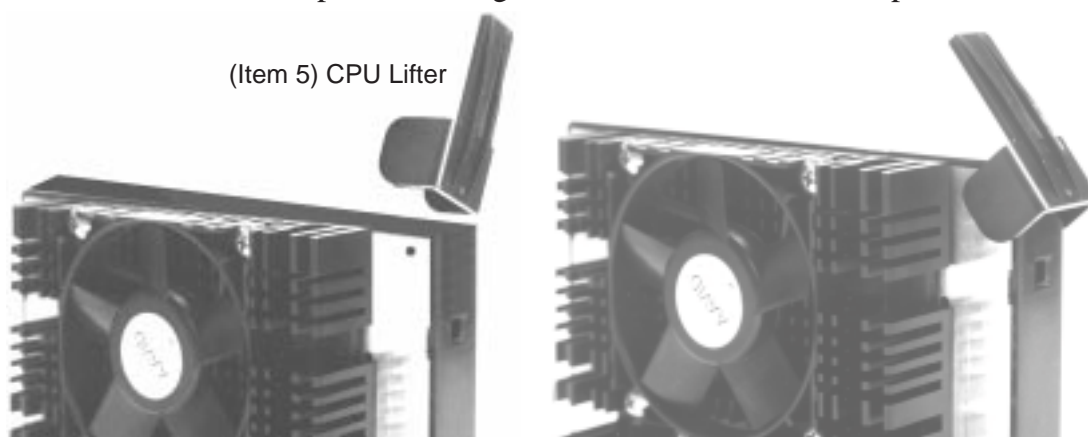
(Item 6) Retention Mechanism Brace Bar



Step 4: Install Cartridge Lifters

Each Xeon processor requires two lifters in order to allow safe removal of the processor. The lifters clamp the cartridge on the two holes at each top corner.

(Item 5) CPU Lifter



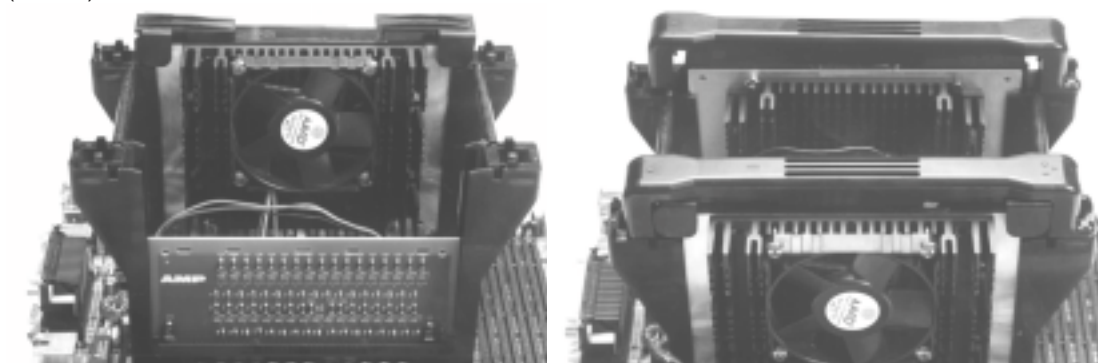
One lifter being inserted over the cartridge from a vertical position

Half-collapsed lifter after installation. The lifter should freely rise and lower.

Step 5: Install a 2nd Processor or Termination Module

The motherboard supports a single or dual processor configuration. When a single processor configuration is desired, a front side bus termination module is required on the free slot 2 connector.

(Item 7) Front Side Bus Termination Module



Single processor configuration with terminator.

Dual processor configuration.

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Step 6: Install Retention Mechanism Cap

The retention mechanism has a cap to keep the processor down while preventing the retention mechanism's walls from spreading.



(Item 8) Retention Mechanism Lock Bar

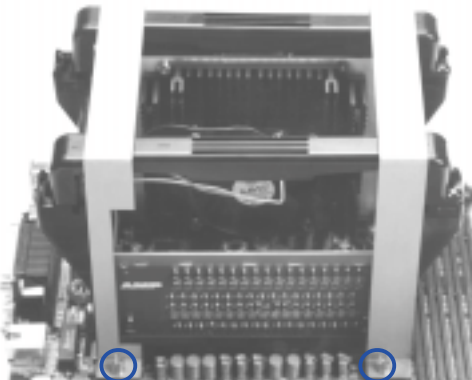
The cap must go in from the left side first (toward the ATX connectors). The left side has one dot, while the right side has two dots.

The right end of the cap enters the retention mechanism and a click is heard as it snaps in place.

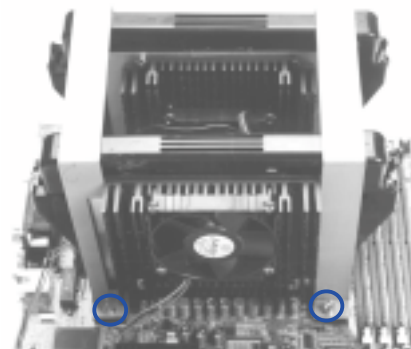
Step 7: Install Retention Mechanism Frame

In order to keep the retention mechanism lock bar from coming free and to add extra stability to the plastic retention mechanisms, a metal frame is used across both retention mechanisms. After installing the frame, four captive nuts should be tightened on the feet of the frame to the screws protruding from the retention mechanisms. This is the end of the Xeon™ processor installation and you should have 4 extra (only 11 is used out of 15) captive nuts in case you lose any.

(Item 9) Retention Mechanism Support Frame



Retention mechanism frame around single processor configuration with terminator.



Retention mechanism frame around dual processor configuration.

Removing the Xeon™ Processor

If you want to remove the processor, first remove the retention mechanism frame, then remove the cap. The processor is pulled out of the slot 2 connector by flipping both lifters at the same time so that the processor raises out of the connector. When both lifters are vertical, pull out the processor by holding the lifters.



The processor raised out of the slot 2 connector by the reverse force of the lifters as they are pryed to a vertical position.