



AMD Geode™ NX Processor and Heatsink

Installation Guide

Revision: 32603A Issue Date: November 2004

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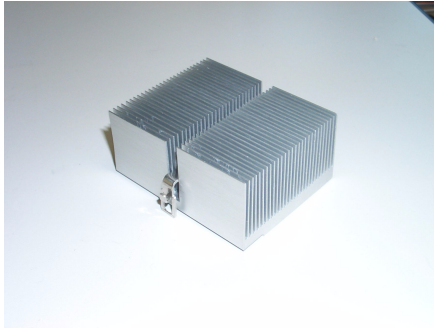
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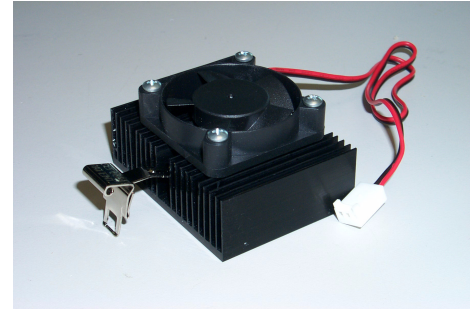
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1.0 Introduction

The AMD Geode™ NX 1250@6W processor* and the AMD Geode™ NX 1500@6W processor** require only a heatsink and can be used in fanless applications. The AMD Geode™ NX 1750@14W processor*** requires a heatsink and a fan for proper cooling. AMD provides an AVC 212BJ0 heatsink for the Geode NX 1250@6W processor and Geode NX 1500@6W processor, and a Therma-Flo E1305 heatsink and fan for the Geode NX 1750@14W processor. See 5.0 Heatsink Information for heatsink part number information.



AVC Heatsink



Therma-Flo Heatsink with Fan

Figure 1. AVC Heatsink and Therma-Flo Heatsink with SUNON Fan

The purpose of this document is to provide installation instructions for the AMD Geode NX processors, their heatsink and, when required, fan.

2.0 Processor Installation

1. Unlock the socket by lifting the lever on the side of the socket up to a 90° angle.
2. Position the processor directly above the socket such that its marked corner is towards the back of the socket next to the base of the socket lever, as shown in Figure 2.
3. Carefully insert the processor into the socket until it fits in place. The processor only fits in the correct orientation.

Note: DO NOT force the processor into the socket. Using force could bend the processor pins.

4. When the processor is in place, hold it firmly in the socket while you push down the socket lever to secure the processor. The lever clicks on the side tab to indicate that it is locked.

* This processor operates at 667 MHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodexpbenchmark>.

** This processor operates at 1 GHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodexpbenchmark>.

***This processor operates at 1.4 GHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodexpbenchmark>.

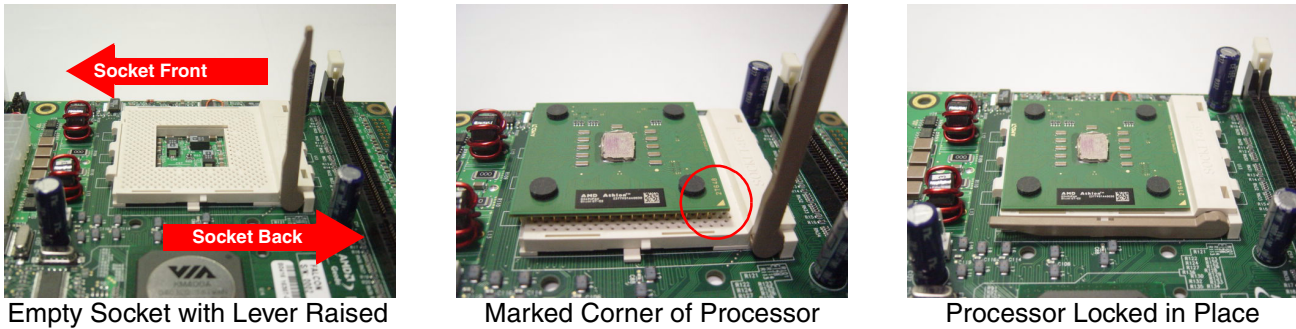


Figure 2. Installing the Processor

3.0 AVC Heatsink Installation

1. Before installing the Heatsink, make sure the Heatsink clip pivot is placed in the twelfth gap, between heatsink fins twelve and thirteen, as shown in Figure 3. The clip fits down in the large slot that runs across the heatsink. Use caution to not disturb the white thermal paste on the bottom of the heat sink.
2. Carefully mount the heatsink over the processor in the orientation shown in Figure 3.

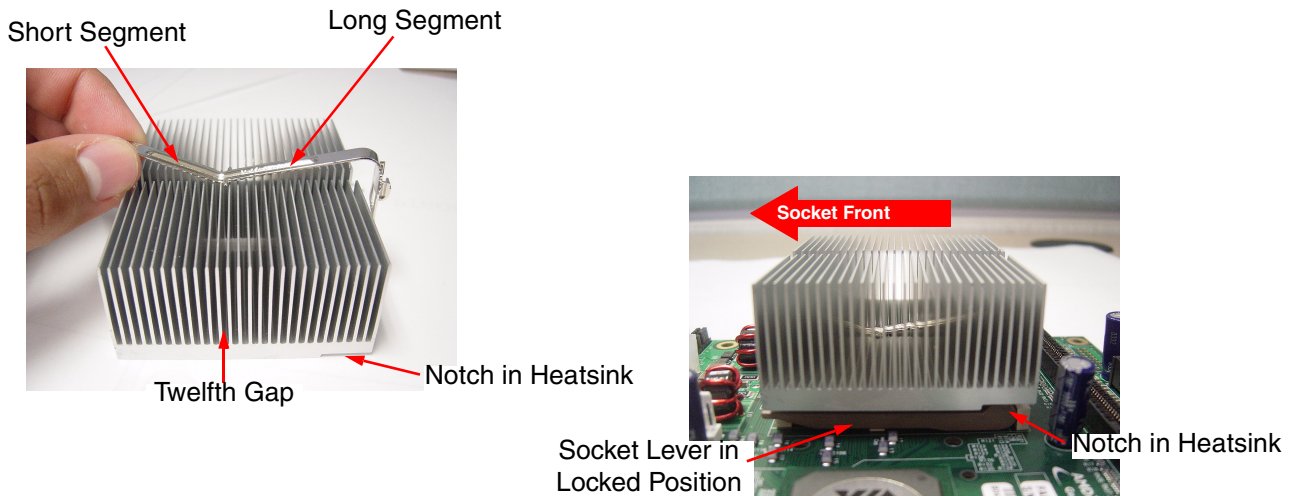


Figure 3. Mounting the Heatsink over the Processor

3. Connect the metal heatsink clip at the front-side of the processor socket as shown in Figure 4.

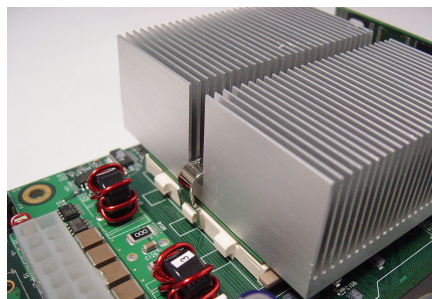


Figure 4. Connecting the Heatsink Clip at the Front of the Processor Socket

4. Connect the other end of the metal heatsink clip at the back-side of the processor socket using a flat head screw driver, as shown in Figure 5.

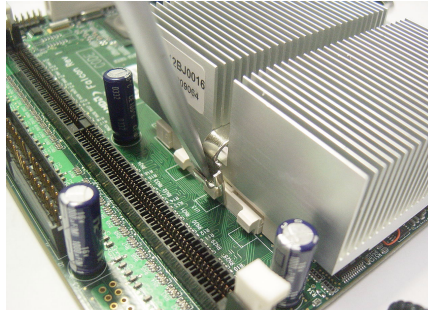


Figure 5. Connecting the Heatsink Clip at the Back of the Processor Socket

4.0 Therma-Flo Heatsink Installation

1. Before installing the Heatsink, remove the thin plastic cover attached to the thermal paste. Be careful NOT to remove the thermal paste.

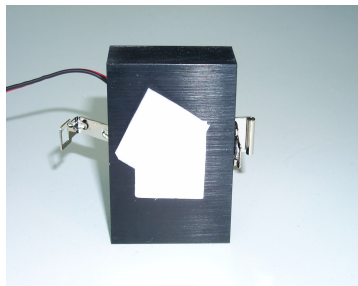
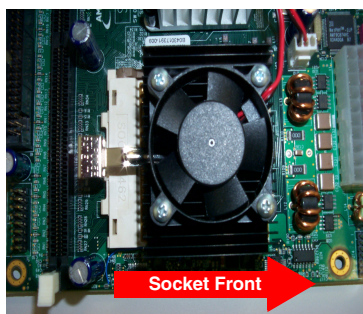
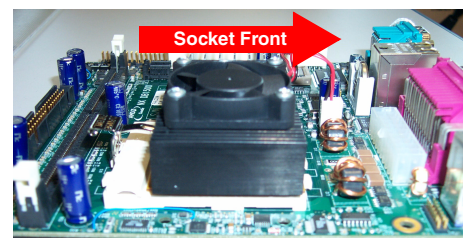


Figure 6. Removing the Thermal Paste Covering

2. Carefully mount the heatsink over the CPU in the orientation shown in Figure 7. Center the heatsink over the processor with the metal thumb clip towards the back-side of the processor socket.



Top View



Side View

Figure 7. Placing the Heatsink Over the Processor

3. Connect the metal heatsink clip at the front-side of the processor socket as shown in Figure 8.

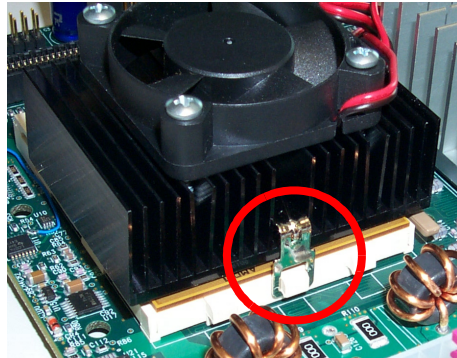


Figure 8. Heatsink Clip Connected to Front of Processor Socket

4. Connect the other end of the metal heatsink clip at the back-side of the processor socket, as shown in Figure 9.

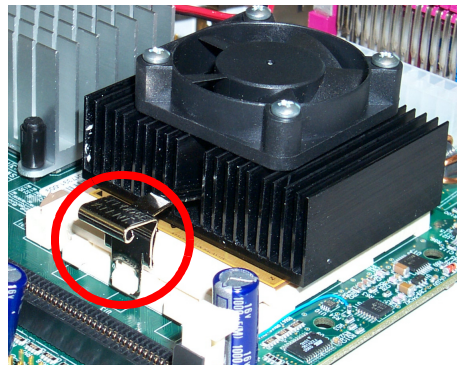


Figure 9. Heatsink Clip Connected to Back of Processor Socket

5.0 Heatsink Information

5.1 AVC Heatsink Assembly Part Numbers

- Heatsink Assembly Reference Number – S7YBJ00001
- Heatsink Part Number – 212BJ0
- Heatsink Clip Part Number – 50209064
- Thermal Grease Part Number – CL10012 (size: 16X16mm, DC340)
- Vacuum Cover Part Number – A717000006

5.2 Therma Flo Heatsink Assembly Part Numbers

- Heatsink Part Number – E1305
- Heatsink Clip Part Number – 3125FCPU69MM

5.3 SUNON Part Number

- Fan Part Number – KD1204PFS