

Intel BX80617I5560M

Intel Core i5-560M Processor (BX80617I5560M) User Manual

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Intel Core i5-560M Processor. The Intel Core i5-560M is a mobile processor designed for laptops, featuring 2 cores and 4 threads, a clock speed of 2.66 GHz, and 3 MB of Intel Smart Cache. It is manufactured using 32 nm lithography and supports BGA1288 and PGA988 sockets.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your processor. Always handle the processor by its edges to avoid touching the gold contacts or the integrated heat spreader (IHS).

2.1. Before You Begin

- Ensure your motherboard is compatible with the Intel Core i5-560M processor (BGA1288 or PGA988 socket).
- Gather necessary tools: thermal paste, screwdriver, and a clean, static-free workspace.
- Refer to your motherboard's manual for specific CPU installation instructions.

2.2. Installation Steps

1. **Prepare the Motherboard:** Open the CPU socket lever on the motherboard.
2. **Insert the Processor:** Carefully align the processor with the socket, ensuring the triangular markers on the CPU and socket match. Gently lower the processor into the socket without forcing it.
3. **Secure the Processor:** Close the CPU socket lever to secure the processor in place.
4. **Apply Thermal Paste:** Apply a small amount of high-quality thermal paste to the center of the processor's IHS. This helps transfer heat efficiently to the heatsink.
5. **Install Heatsink and Fan:** Mount the compatible heatsink and fan assembly onto the motherboard, ensuring it makes firm contact with the processor. Connect the fan's power cable to the designated CPU fan header on the motherboard.



Image showing the top view of the Intel Core i5-560M Processor, highlighting its integrated heat spreader and branding.

3. OPERATING REQUIREMENTS

The Intel Core i5-560M processor is designed to function within specific system environments. Ensure your system meets the following general requirements for stable operation:

- **Compatible Motherboard:** A motherboard with a BGA1288 or PGA988 socket and a compatible chipset.
- **Adequate Cooling:** A properly installed heatsink and fan or other cooling solution capable of dissipating the heat generated by the processor.
- **System BIOS/UEFI:** Ensure your motherboard's BIOS/UEFI firmware is updated to support the Intel Core i5-560M processor. Refer to your motherboard manufacturer's website for updates.
- **Operating System:** A compatible operating system (e.g., Windows, Linux) with appropriate drivers installed.

After installation, power on your system and verify that the processor is recognized correctly in the BIOS/UEFI settings and within your operating system's device manager.

4. MAINTENANCE

Regular maintenance helps ensure the longevity and stable performance of your processor and system.

- **Dust Removal:** Periodically clean dust from the heatsink fins and fan blades using compressed air. Dust accumulation can impede airflow and lead to overheating.
- **Thermal Paste:** Over time, thermal paste can dry out. If you notice increased operating temperatures, consider reapplying fresh thermal paste. This typically involves removing the heatsink, cleaning off old paste, and applying new paste.
- **Temperature Monitoring:** Use system monitoring software to keep track of your CPU temperatures. High temperatures can indicate insufficient cooling or a need for maintenance.

5. TROUBLESHOOTING

If you encounter issues after installing your processor, consider the following troubleshooting steps:

- **No Power/No POST:** Double-check all power connections, especially the CPU power connector. Ensure the processor is seated correctly in its socket and the lever is fully closed.
- **System Instability/Crashes:** Verify that your motherboard's BIOS/UEFI is updated to the latest version. Check RAM modules for proper seating. Monitor CPU temperatures to rule out overheating.
- **Incorrect CPU Recognition:** If the BIOS or operating system does not correctly identify the processor, ensure the BIOS/UEFI is updated. Re-seat the processor to confirm proper contact.
- **Overheating:** Confirm the heatsink is properly installed and making good contact with the CPU. Ensure the thermal paste application is correct. Check that the CPU fan is spinning and connected to the correct header.

For persistent issues, consult your motherboard's manual or Intel's official support resources.

6. SPECIFICATIONS

Feature	Detail
Processor Number	i5-560M
# of Cores	2
# of Threads	4
Clock Speed	2.66 GHz
Sockets Supported	BGA1288, PGA988
Intel Smart Cache	3 MB
Lithography	32 nm
Product Dimensions	5.5 x 4.8 x 1.8 inches
Item Weight	2.4 ounces
Manufacturer	Intel
ASIN	B0049T1FO8
Item Model Number	BX80617I5560M
Date First Available	October 15, 2010

Feature	Detail
CPU Model	Core i5
CPU Speed	2.66 GHz
CPU Socket	BGA1288, PGA988
Secondary Cache	3 MB

7. WARRANTY INFORMATION

For specific warranty terms and conditions related to your Intel Core i5-560M Processor, please refer to the official Intel warranty documentation provided with your purchase or visit the official Intel website. Warranty coverage typically varies based on region and point of purchase.

8. SUPPORT

If you require further assistance or have questions regarding your Intel Core i5-560M Processor, please utilize the following resources:

- **Intel Support Website:** Visit www.intel.com/support for drivers, software, and troubleshooting guides.
- **Contact Intel Support:** Information on contacting Intel customer service can be found on their official support website.
- **Motherboard Manufacturer:** For system-specific issues, consult your motherboard manufacturer's support resources.