## Intel BLKDH55TC

# Intel DH55TC Motherboard User Manual

Model: BLKDH55TC

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Intel DH55TC motherboard. The Intel DH55TC is a Micro-ATX form factor motherboard designed for Intel LGA 1156 processors, featuring the Intel H55 chipset. It supports DDR3 memory and integrated graphics capabilities (with compatible CPUs).
Please read this manual thoroughly before proceeding with installation to ensure proper setup and to prevent damage to your components.

## 2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury and damage to your equipment:

- Always disconnect the power cord from the wall outlet before installing or removing any components.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to discharge static electricity before handling components. Static discharge can damage sensitive electronic parts.
- Handle the motherboard by its edges. Avoid touching components or connectors directly.
- Ensure proper ventilation within your computer case to prevent overheating.
- Keep liquids away from computer components.
- If you encounter difficulties, consult a qualified technician.

## 3. PACKAGE CONTENTS

Your Intel DH55TC motherboard package should typically include the following items. Please note that contents may vary depending on the retailer or if purchased as a bulk item.

- Intel DH55TC Motherboard
- I/O Shield (for the rear panel ports)
- SATA Data Cables
- Quick Start Guide (if included)

*Note: Some bulk or refurbished packages may not include an I/O shield or SATA cables. Please verify contents upon receipt.*

## 4. SETUP AND INSTALLATION

Follow these steps for the proper installation of your motherboard and associated components.

### 4.1. Preparing the Motherboard

Before installing the motherboard into the computer case, it is recommended to install the CPU, CPU cooler, and RAM modules.

1. **Install the CPU:**

   Locate the LGA 1156 CPU socket. Open the socket lever and remove the protective cover. Carefully align the CPU (matching the golden triangle on the CPU with the triangle on the socket) and place it gently into the socket. Close the lever to secure the CPU. Do not force the CPU into the socket.
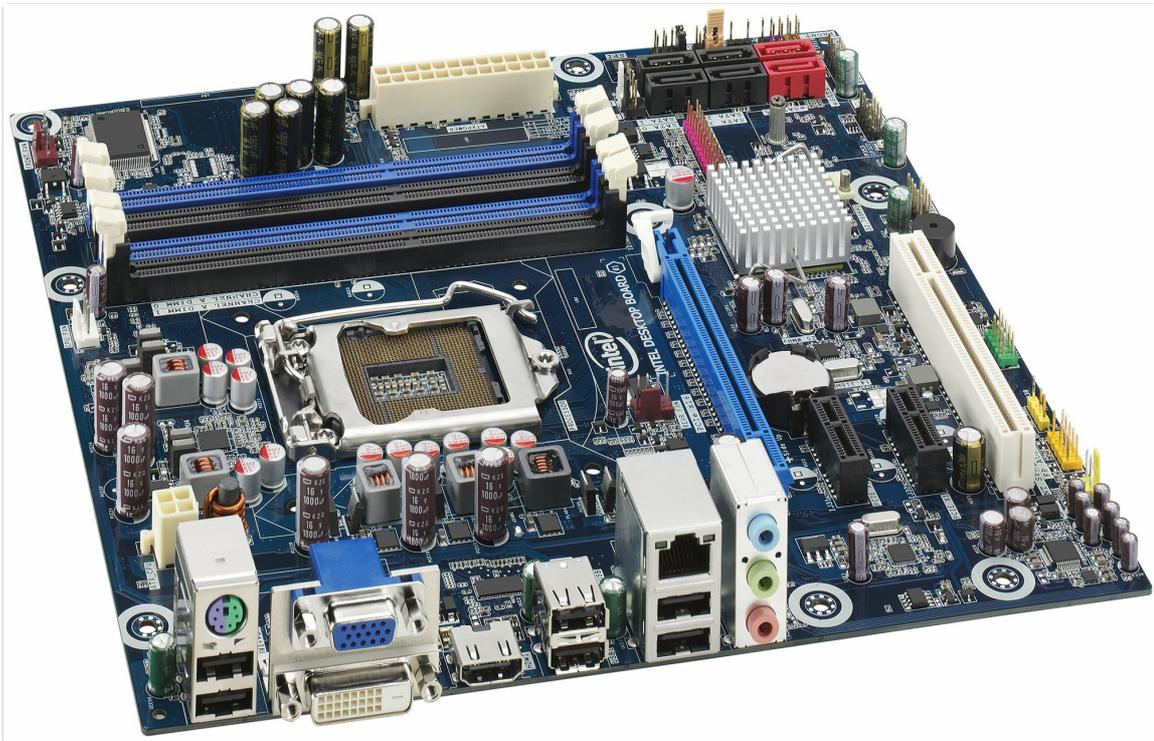
   

   *Image: Intel DH55TC Motherboard. This image shows the general layout of the motherboard, including the CPU socket (LGA 1156) and memory slots.*

2. **Install the CPU Cooler:**

   Apply thermal paste to the CPU (if not pre-applied on the cooler). Mount the CPU cooler according to its manufacturer's instructions, ensuring it is securely fastened and making good contact with the CPU.

3. **Install RAM Modules:**

   Open the clips on the DIMM slots. Align the notch on the DDR3 RAM module with the notch in the DIMM slot. Insert the module firmly until the clips snap into place. For dual-channel performance, install modules in matching color slots (refer to the motherboard diagram for specific slot pairing).

### 4.2. Installing the Motherboard into the Case

4. **Install the I/O Shield:**

   Snap the I/O shield into the opening at the rear of your computer case from the inside.

5. **Mount the Motherboard:**

Carefully place the motherboard into the case, aligning the screw holes on the motherboard with the standoffs in the case. Ensure the I/O ports align with the I/O shield. Secure the motherboard with screws.

## 4.3. Connecting Peripherals and Power

6. **Connect Power Cables:**

Connect the 24-pin ATX main power connector and the 4-pin (or 8-pin) ATX 12V CPU power connector from your power supply to the corresponding ports on the motherboard.

7. **Connect Storage Devices:**

Connect SATA data cables from your hard drives or SSDs to the SATA ports on the motherboard. Connect power cables from the power supply to these devices.

8. **Connect Front Panel Connectors:**

Connect the power button, reset button, HDD LED, power LED, and USB/audio headers from your case to the corresponding pins on the motherboard. Refer to the motherboard's silkscreen labels for correct pin assignments.

9. **Install Expansion Cards:**

If using a dedicated graphics card or other expansion cards, insert them into the appropriate PCIe or PCI slots and secure them with screws.

## 4.4. Initial Power-On and Driver Installation

10. **First Boot:**

After all connections are made, connect your monitor, keyboard, and mouse. Power on the system. The system should boot to the BIOS/UEFI setup screen or begin the operating system installation process.

11. **BIOS/UEFI Configuration:**

Access the BIOS/UEFI by pressing the designated key during startup (usually DEL, F2, or F10). Configure boot order, date/time, and other system settings as needed.

12. **Driver Installation:**

After installing your operating system, install the necessary drivers for the chipset, audio, LAN, and any other integrated components. For this older model, official Intel support for drivers may be limited. It is recommended to search for "Intel DH55TC drivers" online, potentially on archive websites or through your operating system's automatic driver detection.

## 5. OPERATING THE MOTHERBOARD

Once the system is assembled and the operating system is installed, the motherboard functions as the central hub for your computer. Key operational aspects include:

- **BIOS/UEFI Access:** To modify fundamental system settings, press the designated key (e.g.,DEL, F2) during the initial boot sequence.
- **Operating System Interaction:** The motherboard facilitates communication between the CPU, RAM, storage, and peripherals under the control of your installed operating system.
- **Monitoring:** Various software tools can be used within your operating system to monitor motherboard temperatures, fan speeds, and voltage levels.

# 6. MAINTENANCE

Proper maintenance ensures the longevity and stable operation of your motherboard and system.

- **Dust Removal:** Periodically clean dust from inside your computer case, especially from heatsinks and fans, using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **BIOS Updates:** Check Intel's support website (or reputable archive sites for older models) for any available BIOS updates. BIOS updates can improve compatibility, stability, and performance. Follow update instructions carefully to avoid system damage.
- **Driver Updates:** Keep your system drivers updated for optimal performance and compatibility.

# 7. TROUBLESHOOTING

This section addresses common issues you might encounter.

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
| System does not power on. | Loose power connections, faulty power supply, faulty power button. | Check 24-pin and 4/8-pin CPU power connectors. Ensure power supply is switched on. Test power supply. |
| No display on monitor. | Incorrect monitor connection, faulty graphics card (if applicable), RAM not seated correctly, CPU issue. | Ensure monitor cable is connected to the correct port (motherboard or graphics card). Reseat RAM modules. Check CPU installation. |
| System boots but crashes or is unstable. | Overheating, faulty RAM, driver issues, corrupted OS. | Check CPU and case fan operation. Run memory diagnostic tools. Reinstall or update drivers. Reinstall OS if necessary. |
| USB devices not recognized. | Incorrect front panel USB connection, missing USB drivers, faulty USB port. | Verify front panel USB header connection. Install chipset/USB drivers. Test with different USB ports. |

# 8. SPECIFICATIONS

Below are the technical specifications for the Intel DH55TC motherboard:

| Feature | Detail |
|---------|--------|
| Brand | Intel |
| Model Name | BLKDH55TC |
| CPU Socket | LGA 1156 |
| Compatible Processors | Intel Pentium (and other LGA 1156 processors like Core i3/i5/i7) |
| Chipset Type | Intel H55 |
| RAM Memory Technology | DDR3 DIMM |
| Memory Clock Speed | 1333 MHz (Max) |

| Feature | Detail |
|---|---|
| Memory Storage Capacity (Max) | 16 GB |
| Product Dimensions | 9.6 x 9.6 x 2.8 inches (Micro-ATX) |
| Item Weight | 1.28 pounds |
| Date First Available | February 24, 2010 |

## 9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided at the time of purchase or contact your retailer. As this is an older product, direct manufacturer support from Intel may be limited.
For technical assistance, driver downloads, and further information, you may visit the official Intel support website or search online communities and archives for resources related to the Intel DH55TC motherboard.
**Intel Support Link:** Intel Motherboard Support