

## HP 582679-001

# HP 582679-001 Desktop ETON Motherboard H-IG41-uATX User Manual

Model: 582679-001 | Revision: 1.1

## 1. INTRODUCTION

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This manual provides essential instructions for the installation, operation, maintenance, and troubleshooting of the HP 582679-001 Desktop ETON Motherboard (H-IG41-uATX Rev:1.1). Please read this manual thoroughly before proceeding with installation or operation to ensure proper functionality and to prevent damage to the component or other system parts.

## 2. PRODUCT OVERVIEW

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The HP 582679-001 Desktop ETON Motherboard is designed for desktop personal computers, featuring an LGA 775 socket and an Intel G41 Express chipset. This motherboard supports DDR3 memory and is compatible with various Intel processors, including Pentium 4, Pentium D, Pentium Extreme Edition, Celeron D, and Core 2 series. It serves as the central hub for all computer components, facilitating communication and power distribution.



Figure 1: HP 582679-001 Desktop ETON Motherboard. This image displays the overall layout of the motherboard, including the CPU socket, RAM slots, expansion slots, and various connectors.

## 3. SETUP

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## 3.1 Safety Precautions

- Always disconnect the power supply 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.
- Handle the motherboard by its edges to avoid touching sensitive components.
- Ensure proper ventilation in your computer case.

## 3.2 Component Identification

Familiarize yourself with the key components and connectors on the motherboard:

- **CPU Socket (LGA 775):** Location for the central processing unit.
- **DDR3 DIMM Slots:** Slots for installing DDR3 memory modules.
- **PCI/PCIe Slots:** Expansion slots for graphics cards, network cards, etc.
- **SATA Ports:** Connectors for storage devices like hard drives and SSDs.
- **24-Pin ATX Power Connector:** Main power input from the power supply.
- **4-Pin CPU Power Connector:** Additional power for the CPU.
- **Front Panel Connectors:** Pins for power button, reset button, USB ports, audio jacks, and indicator LEDs.
- **I/O Panel:** Ports for external devices (USB, Ethernet, Audio, Video).

## 3.3 Installation Steps

1. **Prepare the Case:** Install standoffs in the computer case that align with the motherboard's mounting holes.
2. **Install the CPU:** Open the CPU socket lever, carefully place the LGA 775 CPU into the socket, ensuring proper alignment with the notches. Close the lever to secure the CPU.
3. **Install the CPU Cooler:** Apply thermal paste (if not pre-applied) and install the CPU cooler according to its manufacturer's instructions. Connect the CPU fan cable to the designated header on the motherboard.
4. **Install RAM:** Open the clips on the DDR3 DIMM slots. Align the memory module with the slot key and press firmly on both ends until the clips snap into place.
5. **Mount the Motherboard:** Carefully place the motherboard into the case, aligning it with the standoffs and the I/O shield. Secure it with screws.
6. **Connect Power:** Connect the 24-pin ATX power connector and the 4-pin CPU power connector from the power supply to the motherboard.
7. **Connect Storage Devices:** Connect SATA data cables from your hard drives/SSDs to the SATA ports on the motherboard. Connect SATA power cables from the power supply to the drives.
8. **Connect Front Panel Cables:** Refer to your case manual and the motherboard's silkscreen labels to connect the power button, reset button, USB, audio, and LED cables to the correct headers.
9. **Install Expansion Cards:** If applicable, install graphics cards or other expansion cards into the appropriate PCI/PCIe slots and secure them.

## 4. OPERATING

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### 4.1 First Boot and BIOS Setup

After completing the hardware installation, connect a monitor, keyboard, and mouse. Power on the system. During the initial boot sequence, press the designated key (usually **DEL**, **F2**, or **F10**) to enter the BIOS (Basic Input/Output System) setup utility. In the BIOS, you can configure boot order, system time, and other hardware settings. Save changes and exit to continue booting.

### 4.2 Driver Installation

Once the operating system is installed, it is crucial to install the necessary drivers for the motherboard's components

(chipset, audio, network, graphics if integrated). These drivers are typically available on the HP support website for your specific motherboard model or the original system it came from. Installing correct drivers ensures optimal performance and stability.

## 5. MAINTENANCE

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### 5.1 Cleaning

Regularly clean the interior of your computer case to prevent dust buildup, which can lead to overheating and component failure. Use compressed air to gently remove dust from the motherboard, CPU cooler, and fan blades. Ensure the system is powered off and unplugged before cleaning.

### 5.2 BIOS Updates

BIOS updates can provide improved compatibility, stability, and new features. Check the official HP support website for available BIOS updates for your motherboard model. Follow the provided instructions carefully, as an incorrect BIOS update can render the motherboard inoperable.

### 5.3 Component Checks

Periodically inspect the motherboard for any visible signs of damage, such as bulging capacitors, burn marks, or loose connections. Ensure all cables are securely seated.

## 6. TROUBLESHOOTING

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### 6.1 Common Issues and Solutions

- **No Power:** Ensure the power supply is connected correctly to the motherboard (24-pin and 4-pin CPU power) and the wall outlet. Check the power supply switch.
- **No Display:** Verify the monitor is connected and powered on. Reseat the graphics card (if applicable) and RAM modules. Try connecting to the integrated graphics output if available.
- **POST Errors/Beep Codes:** Refer to the motherboard's specific beep code patterns (often found in the system's original documentation or HP support) to diagnose hardware issues. Common causes include RAM, CPU, or graphics card problems.
- **System Instability/Crashes:** Check for overheating (monitor CPU/GPU temperatures). Ensure all drivers are up to date. Test memory modules individually.

### 6.2 Diagnostic Steps

1. **Reseat Components:** Power off and unplug the system. Carefully remove and reinsert the CPU, RAM, and any expansion cards.
2. **Clear CMOS:** Disconnect power, remove the CMOS battery for 30 seconds, or use the CMOS clear jumper (refer to motherboard diagram if available). This resets BIOS settings to default.
3. **Minimal Boot Configuration:** Remove all non-essential components (e.g., extra RAM sticks, expansion cards, all but one storage drive) and attempt to boot with only the CPU, one RAM stick, and the necessary power connections.

## 7. SPECIFICATIONS

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Feature	Specification
Manufacturer	HP
Model Number	582679-001

Feature	Specification
CPU Socket	LGA 775
Compatible Processors	Intel Pentium 4, Pentium D, Pentium Extreme Edition, Celeron D, Core 2
RAM Memory Technology	DDR3
Memory Clock Speed (Max)	2133 MHz (System Dependent)
Chipset Type	Intel G41 Express
Main Power Connector	24-Pin ATX
Compatible Devices	Personal Computer

## 8. WARRANTY AND SUPPORT

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For specific warranty information regarding the HP 582679-001 Desktop ETON Motherboard, please refer to the original purchase documentation or visit the official HP support website. HP provides various support resources, including drivers, documentation, and troubleshooting guides. It is recommended to register your product with HP to access full support services.

**HP Official Support:** <https://www.hp.com/support>