

## TB250-BTC Motherboard



- Supports 7th Generation Intel® Core™ Processor
- Intel B250 single chip architecture
- Support 2-DIMM DDR4-2400/ 2133/ 1866 up to 32G maximum capacity
- Support DVI-D
- Support USB 3.0

### Specification

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| CPU SUPPORT      | 7th & 6th Gen Intel® Core™ i7 LGA 1151 Processor<br>7th & 6th Gen Intel® Core™ i5 LGA 1151 Processor<br>7th & 6th Gen Intel® Core™ i3 LGA 1151 Processor<br>7th & 6th Gen Intel® Pentium® LGA 1151 Processor<br>7th & 6th Gen Intel® Celeron® LGA 1151 Processor<br>Maximum CPU TDP (Thermal Design Power) : 95Watt |
| MEMORY           | Support Dual Channel DDR4 2400/ 2133/ 1866 MHz<br>2 x DDR4 DIMM Memory Slot<br>Max. Supports up to 32GB Memory<br>* DDR4 2400 for 7th Generation Intel® Core™ Processor Family                                                                                                                                      |
| INTEGRATED VIDEO | By CPU model<br>Supports DX12<br>Supports HDCP                                                                                                                                                                                                                                                                      |
| STORAGE          | 6 x SATA III Connector<br>1 x M.2 (M Key) 32Gb/s Connector, support M.2 type 2242/ 2260/ 2280 SATA 6Gb/s & PCIe Storage                                                                                                                                                                                             |
| LAN              | Realtek RTL8111H - 10/100/1000Mb/s Controller<br>Support Super LAN Surge Protection                                                                                                                                                                                                                                 |
| AUDIO CODEC      | Realtek ALC887 8-Channel HD Audio<br>Support HD Audio                                                                                                                                                                                                                                                               |
| USB              | 4 x USB 3.0 Port<br>1 x USB 3.0 Header<br>2 x USB 2.0 Port<br>2 x USB 2.0 Port(only 5V power, up to 1.5A)<br>2 x USB 2.0 Header                                                                                                                                                                                     |
| EXPANSION SLOT   | 1 x PCI-E 3.0 x16 Slot<br>5 x PCI-E 3.0 x1 Slot(using for bitcoin mining, it is suggested to change to PCI-E 1.0 via BIOS)                                                                                                                                                                                          |

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| REAR I/O        | 1 x PS/2 Mouse<br>1 x PS/2 Keyboard<br>4 x USB 3.0 Port<br>2 x USB 2.0 Port<br>2 x USB 2.0 Port(only 5V power, up to 1.5A)<br>1 x DVI-D Connector, resolution up to 1920 x 1200 @60Hz<br>1 x LAN Port<br>3 x Audio Jacks                                                                                                                                                                                                                                |
| INTERNAL I/O    | 1 x USB 3.0 Header<br>2 x USB 2.0 Header<br>6 x SATA III Connector (6Gb/s)<br>1 x SATA Power Connector(for rear USB power enhancement)<br>1 x M.2 Key M 32Gb/s Connector, support M.2 type 2242/ 2260/ 2280 SATA 6Gb/s & PCIe Storage<br>1 x Front Audio Header<br>1 x Front Panel Header<br>1 x CPU Fan Connector<br>2 x System Fan Connector<br>2 x PCI-E 12V 4Pin Connector(Must be installed when using for bitcoin mining.)<br>1 x COM Port Header |
| H/W MONITORING  | CPU / System Temperature Monitoring<br>CPU / System Fan Monitoring<br>Smart / Manual CPU Fan Control<br>System Voltage Monitoring                                                                                                                                                                                                                                                                                                                       |
| DIMENSION       | ATX Form Factor Dimension: 29.5cm x 21cm ( W x L )                                                                                                                                                                                                                                                                                                                                                                                                      |
| OS SUPPORT      | Supports Windows 10(x64) / 11(x64) for Intel 7th Generation Processor<br>※Support Windows 7 / 8.1(x64) / 10(x64) / 11(x64) for Intel 6th Generation Processor                                                                                                                                                                                                                                                                                           |
| BUNDLE SOFTWARE | BullGuard<br>Smart Speed LAN(Windows 7/ 8.1 only)<br>Intel Rapid Storage Technology                                                                                                                                                                                                                                                                                                                                                                     |
| ACCESSORIES     | 2 x SATA Cable<br>1 x I/O Shield<br>1 x DVD Driver<br>1 x User Manual                                                                                                                                                                                                                                                                                                                                                                                   |
| FEATURES        | Supports 100% Solid capacitor<br>Supports Charger Booster<br>Supports BIOS Online Update                                                                                                                                                                                                                                                                                                                                                                |

## OVERVIEW



### Intel B250 chipset

Give your small business a boost with the Intel® B250 Chipset and the 7th Generation Intel® Core™ processor. The Intel B250 chipset provides you with the power and performance you need for your small business.



### HD Audio

Provides high quality sound with minimal loss of audio fidelity.

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|     | <h2>AudioArt Capacitors</h2> <p>PRO series comes with Nichicon high-end audio capacitors. Nichicon Capacitors offer artistic-like sound resolution and Hi-Fi audio amplification effect, making your room a live concert.</p>                                                                                                                                                                                                                                                                                                                                        |
|    | <h2>DVI</h2> <p>DVI is better than VGA for LCD displays since it is digital while VGA is analog. For LCD displays, the picture is digitized pixel per pixel. Through DVI, the panel gets data for each pixel, so the picture generated in the Graphics device matches the pixels on the panel itself.</p>                                                                                                                                                                                                                                                            |
|    | <h2>DX12</h2> <p>DirectX 12 introduces the next version of Direct3D, the graphics API at the heart of DirectX. Direct3D is one of the most critical pieces of a game or game engine, and we've redesigned it to be faster and more efficient than ever before. Direct3D 12 enables richer scenes, more objects, and full utilization of modern GPU hardware.</p>                                                                                                                                                                                                     |
|    | <h2>SmartSpeedLAN</h2> <p>SmartSpeedLAN is a free software application which monitors and manages your PC's network behavior. With user-friendly GUI, it allows you to select and prioritize different types of network traffic, including gaming, media streaming, communications or web surfing. You can also set any specific applications, choosing to prioritize or block accordingly. SmartSpeedLAN can feature automatic management options that use adaptive networking intelligence to ensure that you are getting the best online experience possible.</p> |
|  | <h2>USB 3.0</h2> <p>Experience Fastest data transfers at 5 Gbps with USB 3.0--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and backward compatible with previous USB 2.0 components.</p>                                                                                                                                                                                                                                                                         |
|  | <h2>PCIe M.2 32Gb/s</h2> <p>PCI-e M.2 32Gb/s delivers the highest bandwidth and lower latency. It is 3 times faster compared with PCI-e M.2 10Gb/s.</p>                                                                                                                                                                                                                                                                                                                                                                                                              |
|  | <h2>PCIe 3.0</h2> <p>PCIe 3.0 is the ubiquitous and general-purpose PCI Express I/O standard. At 8GT/s bit rate, the interconnect performance bandwidth is doubled over PCIe 2.0, while preserving compatibility with software and mechanical interfaces.</p>                                                                                                                                                                                                                                                                                                        |
|  | <h2>Moistureproof of PCB</h2> <p>The popularity of PC usage and working environment is getting deteriorating and moist (rural, coastal, etc.). The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moisture-proof PCB meets high density and high reliability requirements for moisture proof.</p>                                                                                                                                                                             |
|  | <h2>Low RdsOn P-Pak MOS</h2> <p>Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.</p>                                                                                                                                                                                                                                                                                                                                                                                      |
|  | <h2>USB Power Engine</h2> <p>USB POWER Engine supports SATA power interface with ultra-high load of USB connectors and offers sufficient power to the system for stable operating.</p>                                                                                                                                                                                                                                                                                                                                                                               |

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|     | <h3>Tough Power Enhanced</h3> <p>To ensure the longevity of motherboard, PRO series with Tough Power Enhanced can endure massive electric current and ensure full energy output without additional energy loss, just like a super man protecting your PC system.</p>                                                                                                                                                                                |
|    | <h3>Super Anti-Surge Protection</h3> <p>BIOSTAR exclusive Anti-Surge design provides the best protection of board and extends the product life. Having the latest model of "Transient Voltage Suppressor" on-board can effectively protect the board circuit, reducing the shocks caused by ESD as well as other damages arising from overvoltage transients to enhance system durability.</p>                                                      |
|    | <h3>Super LAN Surge Protection</h3> <p>Super LAN Surge Protection, providing LAN port with more advanced antistatic protection capabilities by adding an integrated chip to strengthen electrical stability and prevent damage from lightning strikes and electrical surges. SLSP (Super LAN Surge Protection) series motherboard upgrades the existing system protection standards with maximum 4X protection comparing to other board makers.</p> |
|    | <h3>ESD Protection</h3> <p>ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the motherboard or parts. ESD protection is designed to protect the motherboard and equipment from damage by EOS.</p>                                                                                       |
|  | <h3>USB Polyswitch</h3> <p>On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safe guard your system and device lifespan.</p>                                                                                                                                                                                                                                                                     |
|  | <h3>OC / OV / OH Protection</h3> <p>OC / OV / OH Protection design detects overvoltage conditions and prevents voltage surges from spreading in real time. It also actively cuts off the overvoltage supply to protect your system.</p>                                                                                                                                                                                                             |
|  | <h3>Header Zone</h3> <p>Users can easily assemble their own computer, a simple-swap data discs and other accessories.</p>                                                                                                                                                                                                                                                                                                                           |

**\*The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!**