

# H110MDE Motherboard



- Supports 7th Generation Intel® Core™ Processor
- Intel H110 single chip architecture
- Support 2-DIMM DDR4-1866/ 2133/2400 up to 32G maximum capacity
- Support USB 3.1 Gen1
- Support DVI display port
- Support GbE LAN

## 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) : 91Watt |
| MEMORY           | Support Dual Channel DDR4 1866/ 2133/2400 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          | 4 x SATA III Connector                                                                                                                                                                                                                                                                                              |
| LAN              | Realtek RTL8111G - 10/100/1000Mb/s Controller                                                                                                                                                                                                                                                                       |
| AUDIO CODEC      | Realtek ALC662 6-Channel HD Audio                                                                                                                                                                                                                                                                                   |
| USB              | 2 x USB 3.1 Port<br>1 x USB 3.1 Gen1 Header<br>2 x USB 2.0 Port<br>2 x USB 2.0 Header                                                                                                                                                                                                                               |
| EXPANSION SLOT   | 1 x PCI-E 3.0 x16 Slot<br>1 x PCI-E 2.0 x1 Slot                                                                                                                                                                                                                                                                     |
| REAR I/O         | 1 x PS/2 Keyboard/Mouse<br>2 x USB 3.1 Port<br>2 x USB 2.0 Port<br>1 x DVI-D Connector, resolution up to 1920 x 1200 @60Hz<br>1 x VGA Port, resolution up to 1920 x 1200 @60Hz<br>1 x LAN Port<br>3 x Audio Jacks                                                                                                   |

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| INTERNAL I/O    | 1 x USB 3.1 Gen1 Header<br>2 x USB 2.0 Header<br>4 x SATA III Connector (6Gb/s)<br>1 x Front Audio Header<br>1 x Front Panel Header<br>1 x CPU Fan Connector |
| H/W MONITORING  | CPU / System Temperature Monitoring<br>CPU / System Fan Monitoring<br>Smart / Manual CPU Fan Control<br>System Voltage Monitoring                            |
| DIMENSION       | Micro ATX Form Factor Dimension: 215mm x 170mm ( W x L )                                                                                                     |
| OS SUPPORT      | Supports Windows 7/ 8.1(64bit)/10(64bit) - 7th Core only support Windows 10)                                                                                 |
| BUNDLE SOFTWARE | BullGuard<br>Smart Speed LAN                                                                                                                                 |
| ACCESSORIES     | 2 x SATA Cable<br>1 x I/O Shield<br>1 x DVD Driver<br>1 x Quick Guide                                                                                        |
| FEATURES        | Supports 100% Solid capacitor<br>Supports Charger Booster<br>Supports BIOS Online Update                                                                     |

## OVERVIEW

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|  | <b>Intel H110 chipset</b><br><p>The Intel® H110 chipset is a single-chipset design to support socket 1151 Intel® 6th generation Intel® Core™ processor-based platform. Provides excellent performance and increased bandwidth and stability. Intel® H110 chipset can also enable iGPU function, letting users enjoy the latest Intel® integrated graphic performance. The PC platform features improved adaptive performance that adds speed when you need it. When combined with advanced system responsiveness, the platform delivers the ultimate PC experience.</p> |
|  | <b>HD Audio</b><br><p>Provides high quality sound with minimal loss of audio fidelity.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|  | <b>DVI</b><br><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>                                                                                                                                                                                                                                                              |
|  | <b>DX12</b><br><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>                                                                                                                                                                                                       |

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|    | <h3>USB 3.1 Gen 1 Type-A</h3> <p>Experience Fastest data transfers at 5 Gbps with USB 3.1 Gen 1--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.1 Gen 1 transfers data 10X faster and backward compatible with previous USB 2.0 components.</p>                                                                                                                               |
|    | <h3>PCIe 3.0</h3> <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>                                                                                                                                                                                       |
|    | <h3>Dual DDR4</h3> <p>The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.</p>                                                                                                                                                                                                                                                                              |
|    | <h3>Moistureproof of PCB</h3> <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>                                                            |
|   | <h3>Low RdsOn P-Pak MOS</h3> <p>Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.</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>                                                                                                                                                                                                                                                                     |

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|  <p><b>BIOS Virus Protection</b></p>    | <h3>BIOS Virus Protection</h3> <p>When enabled, the BIOS will protect the boot sector and partition table by halting the system and flashing a warning message whether there's an attempt to write to these areas.</p>                  |
|  <p><b>OC / OV / OH Protection</b></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> |
|  <p><b>Header Zone</b></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!

