

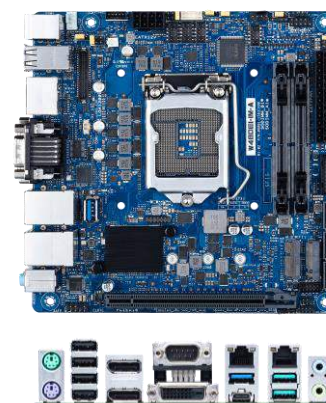
# W480EI-IM-A

Mini-ITX, LGA1200 socket for the 10<sup>th</sup> Gen CPU, W480E chipset, 2\*SO-DIMM.  
1\*PCIe x16, 2\*DP, DVI-D, LVDS/eDP, 2\*M.2 slot, USB Type C

## Features

- Two 260-pin SO-DIMM up to 64GB DDR4 2933/2666/2400/2133 MHz SDRAM.
- Supports 3 displays configuration by multiple interface: 2\*DP/ DVI-D /LVDS or eDP
- 7-year longevity supply
- Wide temperature range: 0~60°C

## Specifications

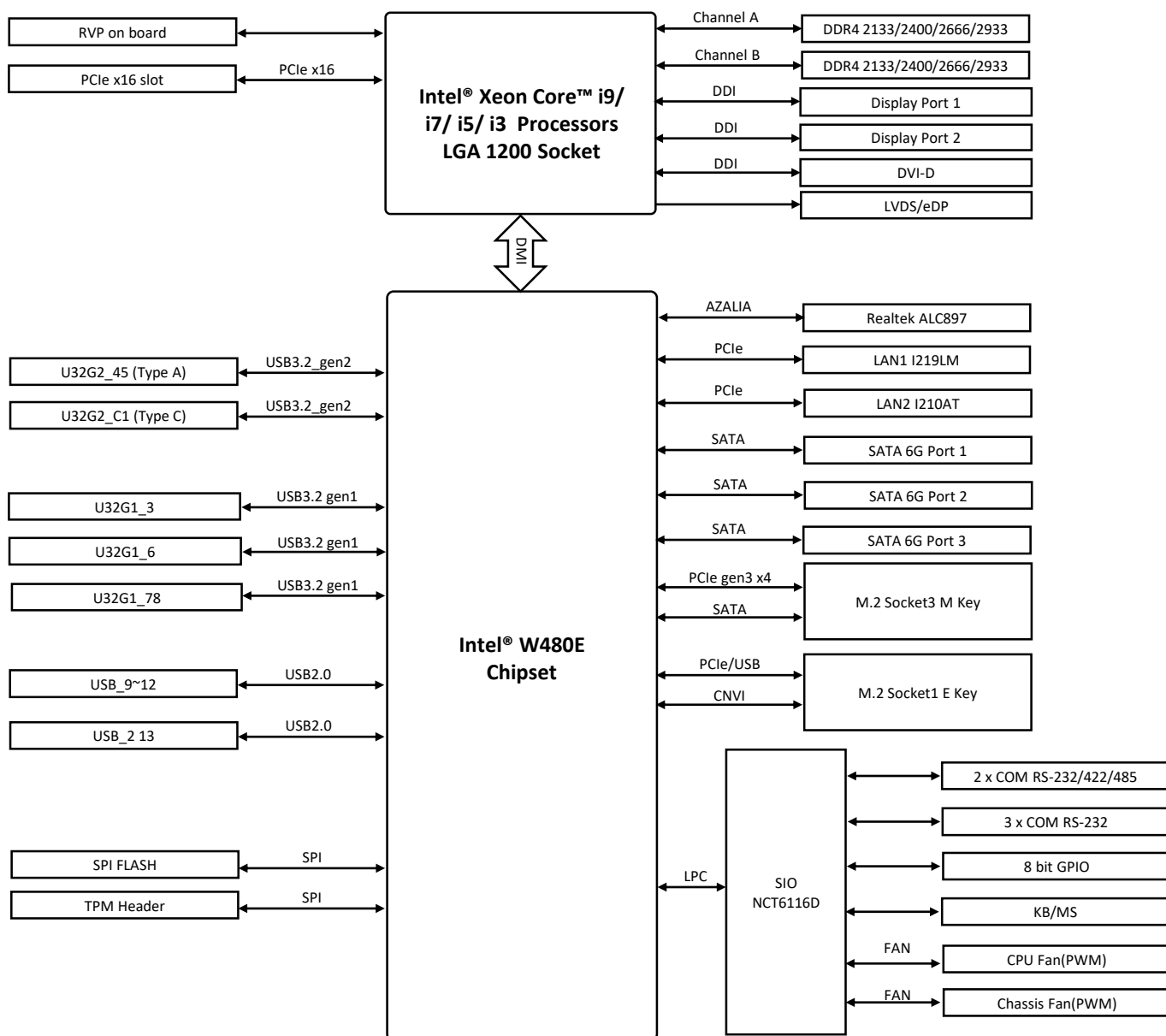


|                           |                          |                                                                                                                                                  |
|---------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Processor System</b>   | CPU                      | LGA1200 Socket for The 10th Generation Intel® Xeon, Core™ i9/ i7/ i5/ i3 Processors<br>Supports 14nm CPU<br>Max. 95W TDP                         |
|                           | Chipset                  | Intel® W480E Chipset                                                                                                                             |
| <b>Memory</b>             | Technology               | DDR4 2933/2666/2400/2133 MHz (ECC support)                                                                                                       |
|                           | Max.                     | Overall: 64GB, Per Module:32GB                                                                                                                   |
|                           | Socket                   | 2 x SO-DIMM                                                                                                                                      |
| <b>Display</b>            | Display Port             | 2, Supports DP 1.4                                                                                                                               |
|                           | DVI-D                    | 1                                                                                                                                                |
|                           | eDP/LVDS                 | 1 x Header (Support either eDP or LVDS ; switched by BIOS)                                                                                       |
| <b>Expansion Slot</b>     | PCIe                     | 1 x PCIe 3.0/2.0 x16 Slot<br>*Bifurcation Support(16x to 8x+8x or 8x+4x+4x )                                                                     |
|                           | M.2                      | 1 x M.2 Socket 1 with E key, Type 2230 for WIFI/BT device (PCIe & CNVi)<br>1 x M.2 Socket 3 with M key, Type 2242/2260/2280(PCIe x4 & SATA mode) |
| <b>Ethernet</b>           | Speed                    | 10/100/1000 Mbps                                                                                                                                 |
|                           | Controller               | 1 x Intel® I210AT, 1 x Intel® I219LM                                                                                                             |
|                           | Teaming                  | Yes                                                                                                                                              |
|                           | Connector                | 2 x RJ-45                                                                                                                                        |
| <b>Audio</b>              | Codec                    | Realtek ALC897 High Definition Audio                                                                                                             |
|                           | Connector                | Line-Out, Line-In                                                                                                                                |
| <b>Storage</b>            | SATA port                | 3 x SATA Gen 3.0, Up to 6Gb/s                                                                                                                    |
|                           | M.2                      | 1 x M.2 Socket 3 with M key, Type 2242/2260/2280(PCIe x4 & SATA mode)                                                                            |
| <b>Rear I/O</b>           | Display Port             | 2                                                                                                                                                |
|                           | DVI-D                    | 1                                                                                                                                                |
|                           | USB3.2 Gen2              | 3 (2*Type A, 1*type C)                                                                                                                           |
|                           | USB3.2 Gen1              | 1 (type A)                                                                                                                                       |
|                           | USB2.0                   | 4 (Type A)                                                                                                                                       |
|                           | Ethernet                 | 2 x RJ45                                                                                                                                         |
|                           | Serial Port              | 1 (RS232/422/485)                                                                                                                                |
|                           | Audio jack               | 2                                                                                                                                                |
|                           | PS/2                     | 1 x Keyboard, 1x Mouse                                                                                                                           |
| <b>Internal Connector</b> | Serial Port              | 4 x COM Header (1 x RS232/422/485, 3 x RS232)                                                                                                    |
|                           | USB3.2 Gen1              | 1 x USB3.2 Gen1 Stick Connector<br>1 x Header Support Additional 2 x USB3.2 Gen1 Ports                                                           |
|                           | USB2.0                   | 1 x Header Support Additional 2 x USB2.0 Ports                                                                                                   |
|                           | CPU Fan                  | 1 x Header (PWM Mode)                                                                                                                            |
|                           | Chassis Fan              | 1 x Header (PWM Mode)                                                                                                                            |
|                           | Disable ME               | 1 x Header                                                                                                                                       |
|                           | LVDS eDP selection       | 1 x Header                                                                                                                                       |
|                           | I <sup>2</sup> C         | 1 x Header                                                                                                                                       |
|                           | Panel SW                 | 1 x Header                                                                                                                                       |
|                           | Front Panel Audio (AAFP) | 1 x Header                                                                                                                                       |
|                           | System Panel             | 1 x Header (10-1 Pin)                                                                                                                            |
|                           | SP/DIF                   | 1 x Header                                                                                                                                       |
|                           | Chassis Intrusion        | 1 x Header                                                                                                                                       |
|                           | Speaker                  | 1 x Header                                                                                                                                       |
|                           | Clear CMOS               | 1 x Header                                                                                                                                       |
|                           | LPC Debug                | 1 x Header                                                                                                                                       |
| GPIO                      | 1 x Header (8 Bit)       |                                                                                                                                                  |

# Specifications

|                           |                                   |                                                               |
|---------------------------|-----------------------------------|---------------------------------------------------------------|
| <b>Internal Connector</b> | AT/ATX Select                     | 1 x Header                                                    |
|                           | Power Connector                   | 1 x 8-pin ATX Power Connector, 1 x 24-pin ATX Power Connector |
|                           | COM 1/2 Ring/ +5V/ +12V Selection | 2 x Jumpers                                                   |
| <b>Watchdog Timer</b>     | H/W                               | YES                                                           |
| <b>Security</b>           | TPM                               | 1 x SPI TPM header                                            |
| <b>Power</b>              | Power Type                        | both ATX mode and DC in (need an extra card)                  |
|                           | Voltage                           | DC in 12V                                                     |
| <b>Operating System</b>   | Microsoft Windows                 | Windows® 10 (64bit ) / Win10 IoT Enterprise                   |
|                           | Linux                             | Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE       |
| <b>Environment</b>        | Operating Temperature             | 0~60° C                                                       |
|                           | Non-Operating Temperature         | -40~85° C                                                     |
|                           | Relative Humidity                 | 0%~85%                                                        |
| <b>Dimension</b>          | Form Factor                       | Mini-ITX, 170 x 170 mm                                        |
| <b>Certification</b>      | Safety                            | CE, FCC                                                       |

# Block Diagram



## Order Information

| Model name  | Part number | Description                 |
|-------------|-------------|-----------------------------|
| W480EI-IM-A | 90ME02D0*   | LGA1200,W480E,DVI-D,2*DP,MB |

\* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

## Packing List

| Part number | Description   | Quantity |
|-------------|---------------|----------|
| 13020*      | IO shield     | 1        |
| 14013*      | SATA 6G CABLE | 1        |
| 13ME0*      | Screw Pack    | 1        |
| 13ME0*      | HEX pack      | 1        |

\* The part number might vary due to part number revision.