

# 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 3.2 Gen2, 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



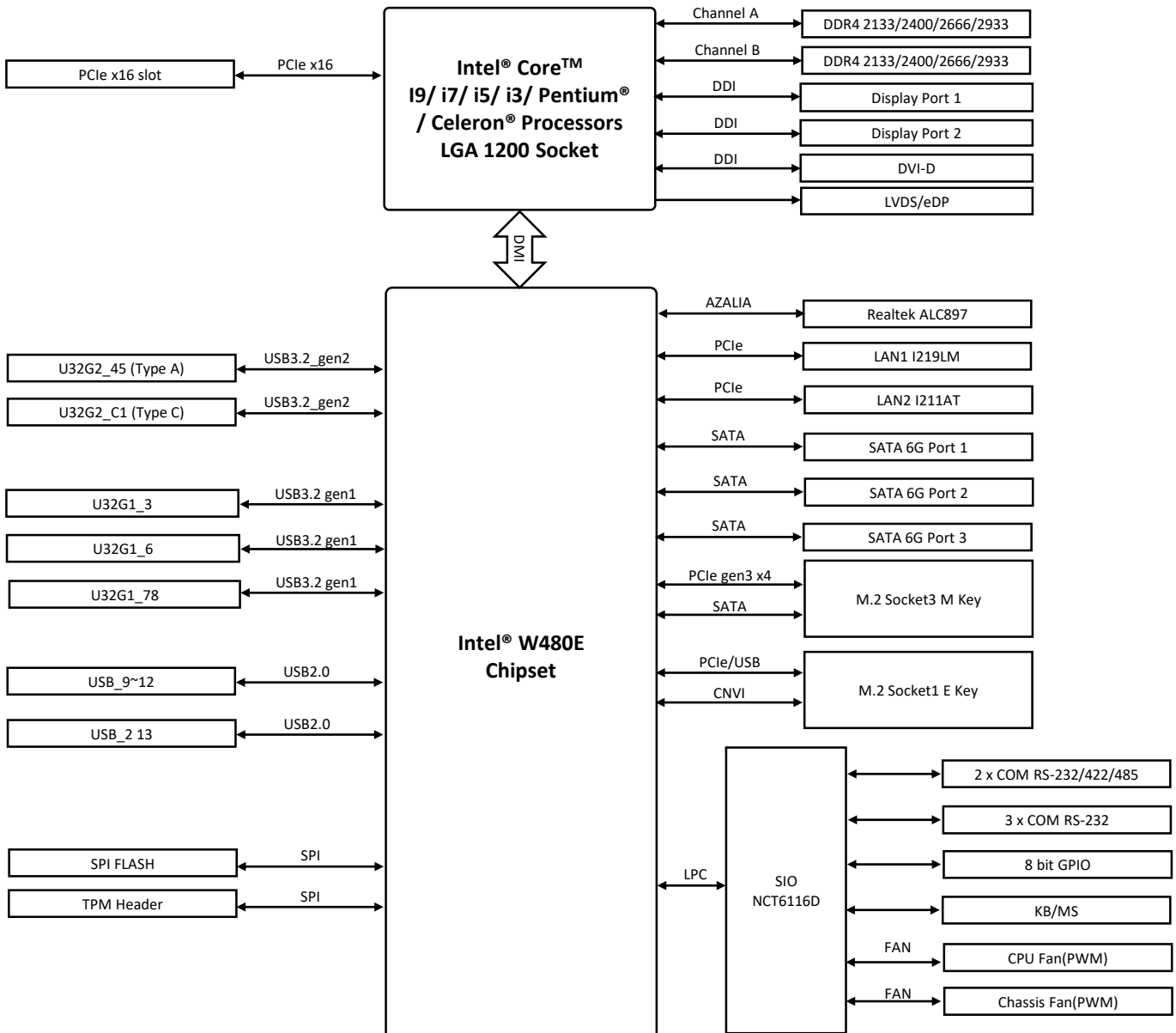
## Specifications

Processor System	CPU	LGA1200 Socket for The 10th Generation Intel® Core™ i9/ i7/ i5/ i3/ Pentium® /Celeron® Processors Supports 14nm CPU Max. 95W TDP
	Chipset	Intel® W480E Chipset
Memory	Technology	DDR4 2933/2666/2400/2133 MHz (ECC support)* *ECC support is available only while using an Intel® Xeon® processor and ECC memory.
	Max. Socket	Overall: 64GB, Per Module:32GB 2 x SO-DIMM
Display	DP++	2, Supports DP++ 1.4, up to 4096x2160 @ 60Hz
	DVI-D	1
	eDP/LVDS	1 x Header (Support either eDP or LVDS ; switched by BIOS)
Expansion Slot	PCIe	1 x PCIe 3.0/2.0 x16 Slot (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) 1 x M.2 Socket 3 with M key, Type 2242/2260/2280 (PCIe x4 & SATA mode)
Ethernet	Speed	10/100/1000 Mbps
	Controller	1 x Intel® I211AT, 1 x Intel® I219LM
	Connector	2 x RJ-45
Audio	Codec	Realtek ALC897 High Definition Audio
	Connector	Line-Out, Line-In
Storage	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)
Rear I/O	DP++	2, Supports DP++ 1.4, up to 4096x2160 @ 60Hz
	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
Internal Connector	PS/2	1 x Keyboard, 1x Mouse
	Serial Port Header	4 x COM Header (1 x RS232/422/485, 3 x RS232)
	USB3.2 Gen1	1 x USB3.2 Gen1 Stick Connector 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/ Chassis Fan	1 x Header (PWM Mode) / 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)
	S/PDIF	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)	
AT/ATX Select	1 x Header	
Power Connector	1 x 8-pin ATX Power Connector, 1 x 24-pin ATX Power Connector	

## Specifications

<b>Watchdog Timer</b>	H/W	YES
<b>Security</b>	TPM	1 x SPI TPM header
<b>Power</b>	IAMT/vPRO	Yes
	Power Type	ATX 12V DC-IN (Support by power transfer card "EMA-DCB-A"). Please contact your sales window for order information
<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>	EMC	CE, FCC

## Block Diagram



## Order Information

Model name	Part number	Description
W480EI-IM-A	90ME02D0*	LGA1200,W480E, 2*DP,MB,i210 LAN, LVDS
W480EI-IM-A	90ME02D1*	LGA1200,W480E, 2*DP,MB,i210 LAN, NO LVDS
W480EI-IM-A R2.0	90ME03W1*	LGA1200,W480E, 2*DP,MB,i211 LAN, NO LVDS
W480EI-IM-A R3.0	90ME04L0*	LGA1200,W480E, 2*DP,MB,i211 LAN

\* 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.