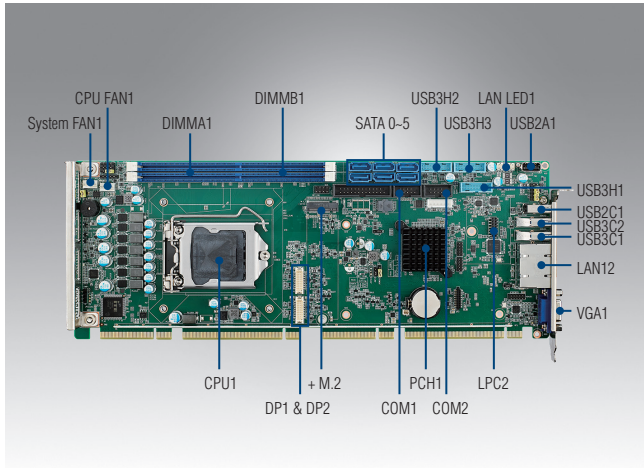


# PCE-7132

## LGA1200 10th Generation Intel® Xeon® W/Core™ i9/i7/i5/i3/Pentium® System Host Board with DDR4, SATA 3.0, USB 3.2, M.2, Dual GbE, and Triple Displays



### Features

- Intel® Xeon® W Family/Core™ i9/i7/i5/i3 LGA1200 processor with W480E chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2666/2933 MHz
- PCIe 3.0, M.2, USB 3.2, SATA 3.0, and SW Raid 0, 1, 5, 10
- Supports VGA and 2 x DVI-D/DP display (with optional cable)
- Supports out-of-band remote management with AMT
- Supports Advantech's LPC modules, SUSI 4.0, and embedded software APIs

Note: Legacy platform is not supported.

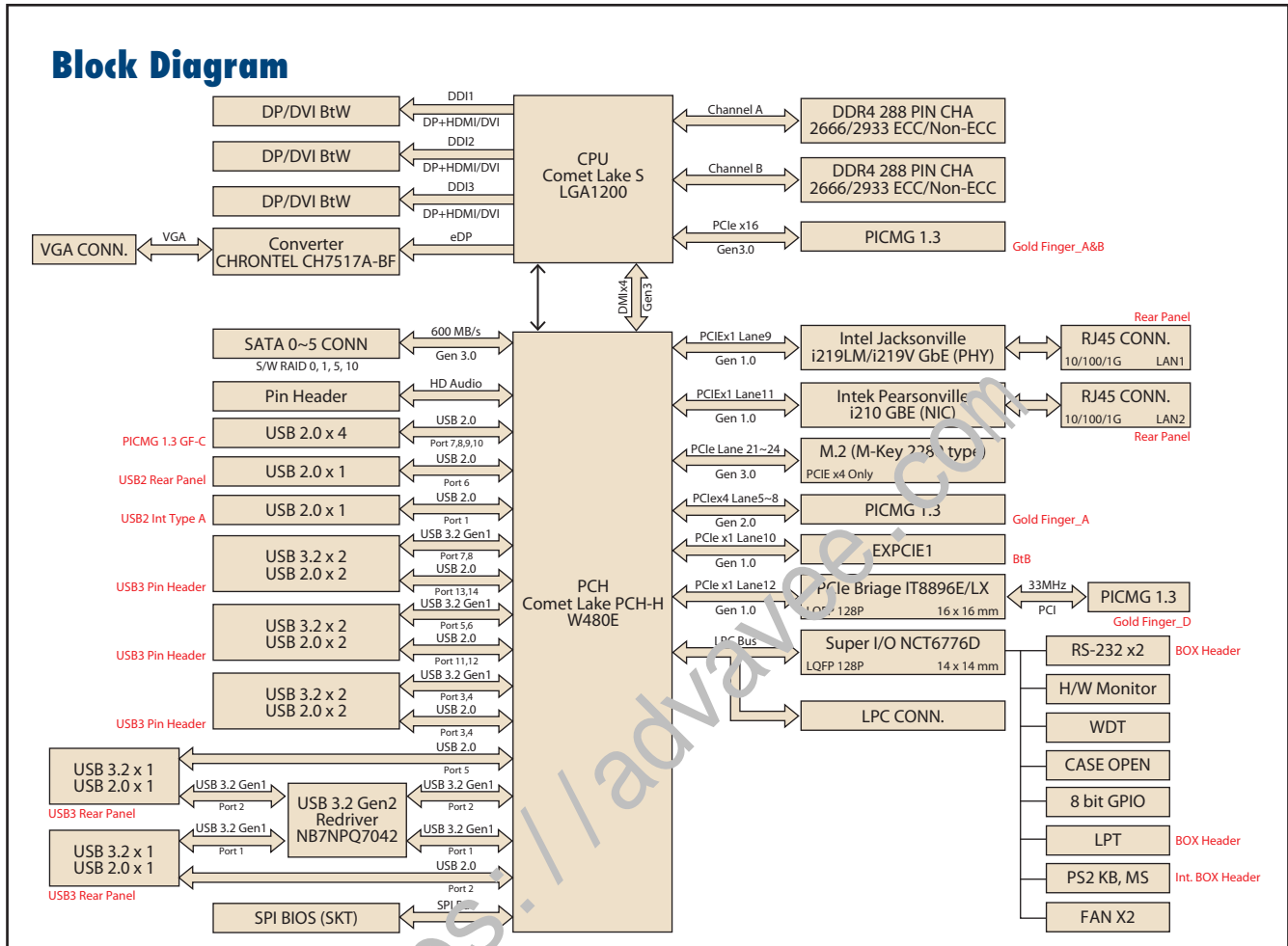
Quiet

CE FCC

### Specifications

|                    |                         |  |           |            |           |            |         |          |           |            |           |           |
|--------------------|-------------------------|--|-----------|------------|-----------|------------|---------|----------|-----------|------------|-----------|-----------|
| Processor System   | CPU                     | i9-10900K  | W-1290E   | W-1290TE   | W-1270E   | W-1270TE   | W-1250E | W-1250TE | i9-10900E | i9-10900TE | i7-10700E | i7-10700E |
|                    | Speed                   | 3.7GHz   | 3.50GHz   | 1.80GHz    | 3.40GHz   | 2.00GHz    | 3.50GHz | 2.40GHz  | 2.80GHz   | 1.80GHz    | 2.00GHz   | 2.90GHz   |
|                    | L3 Cache                | 20MB   | 20MB      | 20MB       | 16MB      | 16MB       | 12MB    | 12MB     | 20MB      | 20MB       | 16MB      | 16MB      |
|                    | Cores                   | 10   | 10        | 10         | 8         | 8          | 6       | 6        | 10        | 10         | 8         | 8         |
|                    | TDP                     | 125W   | 95W       | 35W        | 80W       | 37W        | 80W     | 35W      | 65W       | 35W        | 35W       | 65W       |
|                    | SKU/Chipset             | Intel® W480E   |           |            |           |            |         |          |           |            |           |           |
| BIOS               | AMI® SPI Flash 256 Mbit |  |           |            |           |            |         |          |           |            |           |           |
| Processor System   | CPU                     | i5-10500E  | i5-10500E | i5-10500TE | i3-10100E | i3-10100TE |         |          |           |            |           |           |
|                    | Speed                   | 3.10GHz  | 3.10GHz   | 2.30GHz    | 3.60GHz   | 2.30GHz    |         |          |           |            |           |           |
|                    | L3 Cache                | 12MB   | 12MB      | 12MB       | 6MB       | 6MB        |         |          |           |            |           |           |
|                    | Cores                   | 6  | 6         | 4          | 4         | 4          |         |          |           |            |           |           |
|                    | TDP                     | 65W  | 65W       | 35W        | 65W       | 35W        |         |          |           |            |           |           |
|                    | SKU/Chipset             | Intel® W480E   |           |            |           |            |         |          |           |            |           |           |
| BIOS               | AMI® SPI Flash 256 Mbit |  |           |            |           |            |         |          |           |            |           |           |
| Bus                | PCI-Express             | 1 x PCIe x16/2 x PCIe x8 and 1 x PCIe x4 to backplane  |           |            |           |            |         |          |           |            |           |           |
|                    | PCI                     | 4 x PCI master to backplane, 32-bit, 33 MHz  |           |            |           |            |         |          |           |            |           |           |
| Memory             | Technology              | Dual-channel (non-ECC) U-DIMM DDR4 2666/2933 MHz (supports x8 DDR4 1024 M) (Note: Intel ECC-supported processor must be selected to enable ECC function) |           |            |           |            |         |          |           |            |           |           |
|                    | Max. Capacity           | Up to 64GB (based on CPU)  |           |            |           |            |         |          |           |            |           |           |
|                    | Socket                  | 2 x DDR4 28-pin DIMM   |           |            |           |            |         |          |           |            |           |           |
| Graphics           | Controller              | Chipset integrated with Intel® HD Graphics   |           |            |           |            |         |          |           |            |           |           |
|                    | VRAM                    | Shared system memory is subject to OS  |           |            |           |            |         |          |           |            |           |           |
|                    | VGA                     | Supports resolutions of up to 2048 x 1152 pixel @ 60 MHz   |           |            |           |            |         |          |           |            |           |           |
|                    | DVI-D                   | Supports resolutions of up to 1920x 1200 @ 60 MHz  |           |            |           |            |         |          |           |            |           |           |
|                    | Display Port            | Supports resolutions of up to 4096 x 2160 @ 60 MHz   |           |            |           |            |         |          |           |            |           |           |
| Triple Display     | VGA+DP/DVI-D+DP/DVI-D   |  |           |            |           |            |         |          |           |            |           |           |
| Ethernet           | Interface               | 10/100/1000 Mbps   |           |            |           |            |         |          |           |            |           |           |
|                    | Controller              | LAN 1: Intel® I219-LM<br>LAN 2: Intel® I210-AT   |           |            |           |            |         |          |           |            |           |           |
|                    | Connector with LED      | 2 x RJ45   |           |            |           |            |         |          |           |            |           |           |
| Rear I/O           | USB 3.2 Gen2            | 2  |           |            |           |            |         |          |           |            |           |           |
|                    | USB2.0                  | 1  |           |            |           |            |         |          |           |            |           |           |
|                    | Ethernet                | 2  |           |            |           |            |         |          |           |            |           |           |
|                    | VGA                     | 1  |           |            |           |            |         |          |           |            |           |           |
| Internal Connector | USB                     | 5 x USB 2.0 ( 1 USB Type A + 4 on backplane), 6 x USB 3.2  |           |            |           |            |         |          |           |            |           |           |
|                    | SATA (SW Raid 0,1,5,10) | 6  |           |            |           |            |         |          |           |            |           |           |
|                    | M.2 (2280 Type M)       | 1 (PCIe x4)  |           |            |           |            |         |          |           |            |           |           |
|                    | DP/DVI-D                | 2 (Pin header)   |           |            |           |            |         |          |           |            |           |           |
|                    | COM                     | 2  |           |            |           |            |         |          |           |            |           |           |
|                    | IrDA                    | 1  |           |            |           |            |         |          |           |            |           |           |
|                    | GPIO                    | 8bit   |           |            |           |            |         |          |           |            |           |           |
| Watchdog Timer     | Output                  | System reset   |           |            |           |            |         |          |           |            |           |           |
|                    | Interval                | Programmable 1-255 sec   |           |            |           |            |         |          |           |            |           |           |
| Miscellaneous      | Audio                   | Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E)   |           |            |           |            |         |          |           |            |           |           |
| Power Requirement  | Test Environment        | Intel W-1290E, Memory 2* DDR4 2666U 32GB   |           |            |           |            |         |          |           |            |           |           |
|                    | Voltage                 | +3.3V, +5V, +12V   |           |            |           |            |         |          |           |            |           |           |
|                    | Current                 | 1.15A, 1.54A, 1.38A  |           |            |           |            |         |          |           |            |           |           |
| Environment        | Operating               |  |           |            |           |            |         |          |           |            |           |           |
|                    | Temperature             | 0 ~ 60 °C (dependent on CPU and cooler solution)   |           |            |           |            |         |          |           |            |           |           |
|                    | Humidity                | 40 °C @ 85% relative humidity (non-condensing)   |           |            |           |            |         |          |           |            |           |           |
| Physical           | Dimensions (L x H)      | 338 x 122 mm (13.3" x 4.8")  |           |            |           |            |         |          |           |            |           |           |
|                    |                         | Non-Operating<br>-40 ~ 85 °C<br>60 °C @ 95% relative humidity (non-condensing)   |           |            |           |            |         |          |           |            |           |           |

### Block Diagram



### Ordering Information

| Part Number     | PCH   | Memory      | Backplane            | LAN | VGA | DP/DVI-D | COM | SATA III | M.2 | USB 2.0 | USB 3.1 (Gen1) | USB3.1 (Gen2) | S/W Raid | AMT |
|-----------------|-------|-------------|----------------------|-----|-----|----------|-----|----------|-----|---------|----------------|---------------|----------|-----|
| PCE-7132G2-00A2 | W480E | ECC/No. FCC | PCE-5BXX<br>PCE-7BXX | 2   | Yes | 2*       | 2   | 6        | 1   | 6       | 6              | 2             | Yes      | Yes |

Note: DP/DVI-D cable is optional

### Packing List

| Part Number | Description               | Quantity |
|-------------|---------------------------|----------|
| 1700003194  | Serial ATA HDD data cable | x2       |
| 1701090401  | 1-port COM cable kit      | x1       |
| 2190000902  | Warranty card             | x1       |
| 2041513200  | Startup manual            | x1       |

### Optional Accessories

| Part Number      | Description                                   |
|------------------|---|
| 1960049408N001   | CPU heat sink for 1U Chassis and 35W TDP      |
| 1960050255N001   | CPU cooler for 2U Chassis and 95W TDP         |
| 1960052651N021   | CPU cooler for 2U/4U Chassis and 80W TDP      |
| 1960067860N001   | CPU cooler for 2U/4U Chassis and 125W TDP     |
| 1700002204       | 2-port USB 2.0 cable kit                      |
| 1700028292-01    | 2-port USB 3.0 cable w/ BKT (30 cm)           |
| 1700031719-01    | 4-port USB 3.0 cable kit                      |
| 1701090401       | 1-port COM cable kit                          |
| 1701092300       | 2-port COM cable kit                          |
| PCE-DP10-00A1E   | DP to DP cable kit                            |
| 1700021831-01    | DP to DVI-D cable kit                         |
| PCA-TPM-00B1E    | TPM 2.0 module                                |
| PCA-AUDIO-HDB1E  | Audio module                                  |
| PCA-COM232-00A1E | 4-port RS-232 module via LPC interface        |
| PCA-COM485-00A1E | 4-port RS-422/485 module via LPC interface    |
| PCE-SA01-00A1E   | I/O extension kit (DP, USB, Audio, mini PCIe) |
| 20706WX9HS0098   | PCE-7132 win 10 embedded OS (high-end)        |
| 20706WX9VS0102   | PCE-7132 win 10 embedded OS (value)           |
| 20706WX9ES0112   | PCE-7132 win 10 embedded OS (entry)           |

\* for PCE-7132/5132/5032, PCE-SA01-00A1E miniPCIe only support PCIe x1 signal

### I/O View



PCE-7132G2-00A2