

TECH-4010-787

LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3 ATX with DP/DVI/VGA, DDR4, USB 3.2, M.2



Features

- Intel® 10th generation Core™ i9/i7/i5/i3 processor with Q470E chipset
- Four DIMM sockets up to 128 GB DDR4 2933
- Triple display DP/DVI-D/VGA and dual GbE LAN
- M.2, SATA RAID 0, 1, 5, 10, USB 3.2
- Supports Intel vPro, AMT & TPM technologies
- Supports Redundant ATX power supplies.
- Easy to install front-accessible drive bays to hold two 5.25" and two 3.5" disk drives.
- Front-accessible USB interfaces.
- Designed to withstand environmental extremes, such as shock, vibration and high temperature.
- LED indicators and alarm notification for system fault detection.
- Lockable front door prevents unauthorized access.
- Low noise system fans
- Supports Internal 5.25" DVD-RW.

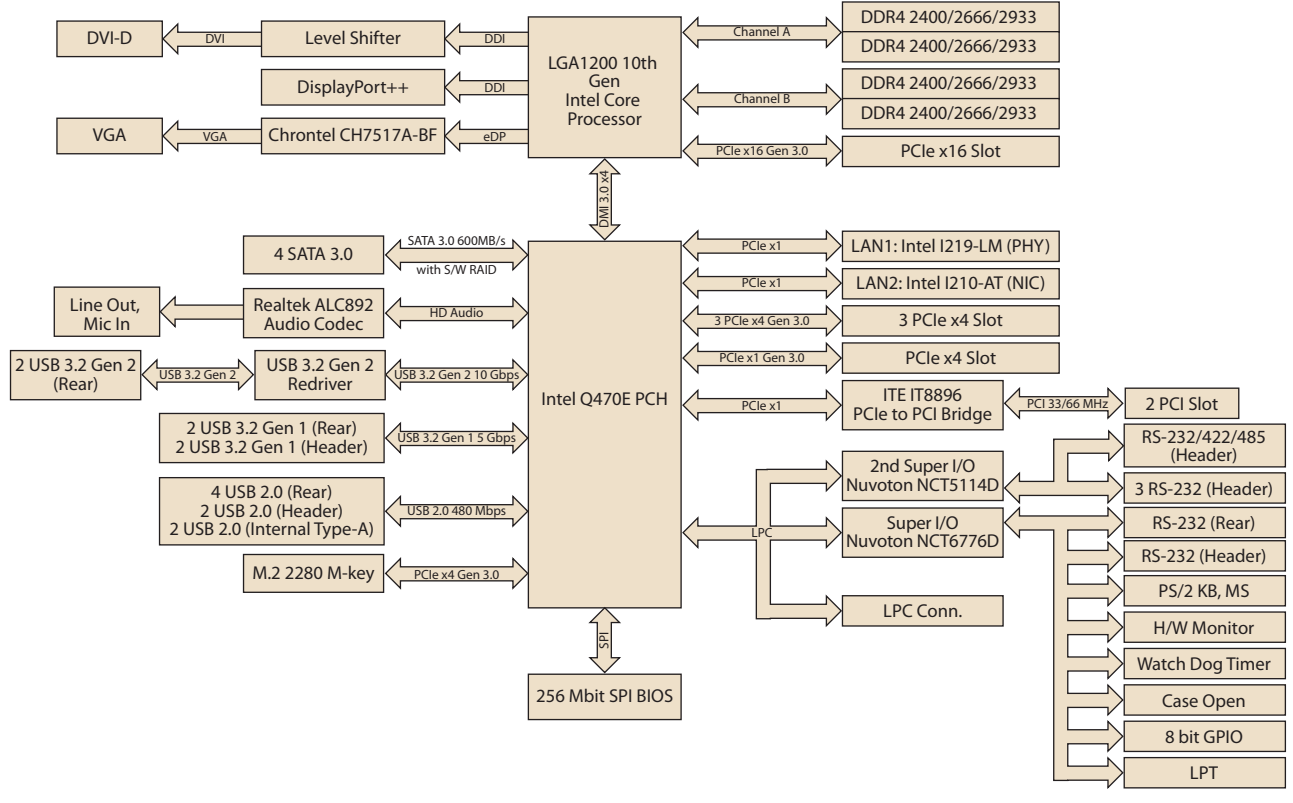
Note 1: TPM module is required to enable Intel vPro and TPM technologies. Note 2: Legacy platform is not supported.

Specifications



| | | | | | | | | | | | |
|--------------------------|------------------------|---|--|-----------|------------|-----------|------------|-----------|-------------------------------|--|--|
| Processor System | CPU | i9-10900E | i9-10900TE | i7-10700E | i7-10700TE | i5-10500E | i5-10500TE | i3-10100E | i3-10100TE | | |
| | Base Frequency | 2.8 GHz | 1.8 GHz | 2.9 GHz | 2.0 GHz | 3.1 GHz | 2.3 GHz | 3.2 GHz | 2.3 GHz | | |
| | L3 Cache | 20 MB | 20 MB | 16 MB | 16 MB | 12 MB | 12 MB | 6 MB | 6 MB | | |
| | Cores | 10 | 10 | 8 | 8 | 6 | 6 | 4 | 4 | | |
| | TDP | 65 W | 35 W | 65 W | 35 W | 65 W | 35 W | 65 W | 35 W | | |
| | Socket | LGA1200 | | | | | | | | | |
| | Chipset | Q470E | | | | | | | | | |
| | BIOS | AMI 256 Mbit SPI | | | | | | | | | |
| | Expansion Slot | PCI | 2 (32-bit/33 MHz) | | | | | | | | |
| | | PCIe x4 (Gen 3) | 4 (3 x link x4, 1 x link x1) | | | | | | | | |
| PCIe x16 (Gen 3) | | 1 | | | | | | | | | |
| Memory | Technology | Dual Channel (Non-ECC) DDR4 2400/2666/2933 | | | | | | | | | |
| | Max. Capacity | 128 GB | | | | | | | | | |
| | Socket | 4 x 288-pin DIMM | | | | | | | | | |
| Graphics | Controller | Intel HD Graphics | | | | | | | | | |
| | VRAM | 1 GB maximum shared memory with 2 GB and above system memory installed | | | | | | | | | |
| Ethernet | Interface | 10/100/1000 Mbps | | | | | | | | | |
| | Controller | GbE LAN1: Intel I219-LM, GbE LAN2: Intel I210-AT | | | | | | | | | |
| | Connector | 2 x RJ-45 | | | | | | | | | |
| SATA | Max Data Transfer Rate | 600 MB/s | | | | | | | | | |
| | Channel | 4 | | | | | | | | | |
| | RAID | 0,1,5,10 | | | | | | | | | |
| Rear I/O | VGA | 1 (Resolution up to 1920 x 1200 @ 60 Hz) | | | | | | | | | |
| | DVI-D | 1 (Resolution up to 1920 x 1200 @ 60 Hz) | | | | | | | | | |
| | DisplayPort | 1 (Resolution up to 4096 x 2304 @ 60 Hz) | | | | | | | | | |
| | Ethernet | 2 | | | | | | | | | |
| | USB | 8 (2 x USB 3.2 Gen 2, 2 x USB 3.2 Gen 1, 4 x USB 2.0) | | | | | | | | | |
| | Audio | 2 (Line-out, Mic-in) | | | | | | | | | |
| | Serial | 1 (RS-232) | | | | | | | | | |
| | Internal Connectors | USB | 6 (2 x USB 3.2 Gen 1 via header, 2 x USB 2.0 via header, 2 x USB 2.0 Type-A connector) | | | | | | | | |
| Serial | | 5 (4 x RS-232, 1 x RS-232/422/485) | | | | | | | | | |
| SATA | | 4 | | | | | | | | | |
| M.2 | | 1 (PCIe x4 M-key 2280 type) | | | | | | | | | |
| Parallel | | 1 | | | | | | | | | |
| GPIO | | 8-bit | | | | | | | | | |
| PS/2 KB/Mouse | | 1 (Optional PS/2 KB/Mouse Cable is required) | | | | | | | | | |
| Watchdog Timer | Output | System reset | | | | | | | | | |
| | Interval | Programmable 1 ~ 255 sec | | | | | | | | | |
| Power Requirement | Power On | Intel Core i5-10500E; DDR4 32 GB x 4 | | | | | | | | | |
| | Voltage | +12V | +5V | +3.3V | +5Vsb | -12V | | | | | |
| | Current | 7.58A | 1.92A | 0.87A | 0.14A | 0.08A | | | | | |
| Environment | Operating | | | | | | | | Non-Operating | | |
| | Temperature | 0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution | | | | | | | -40 ~ 85 °C (-40 ~ 185 °F) | | |
| | Humidity | 40 °C @ 95% RH Non-condensing | | | | | | | 60 °C @ 95% RH Non-condensing | | |
| Physical Characteristics | Dimensions (W x H x D) | 482 x 177 x 479 mm (19" x 7" x 18.9") | | | | | | | | | |

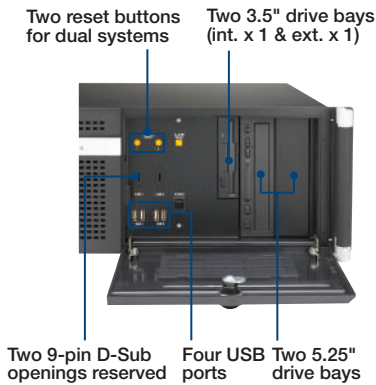
Block Diagram



Ordering Information

| Part Number | Chipset | Memory | Display | USB 3.2 Gen 2 | USB 3.2 Gen 1 | USB 2.0 | COM | GbE LAN | AMT | M.2 | SATA 3.0 | SW RAID |
|---------------|---------|--|------------------|---------------|---------------|---------|-----|---------|-----|-----|----------|---------|
| TECH-4010-787 | Q470E | Non-ECC DDR4 2400/2666/2933 up to 128 GB | VGA + DVI-D + DP | 2 | 4 | 8 | 6 | 2 | Yes | 1 | 4 | Yes |

Front View



Inside View



Bracket View

