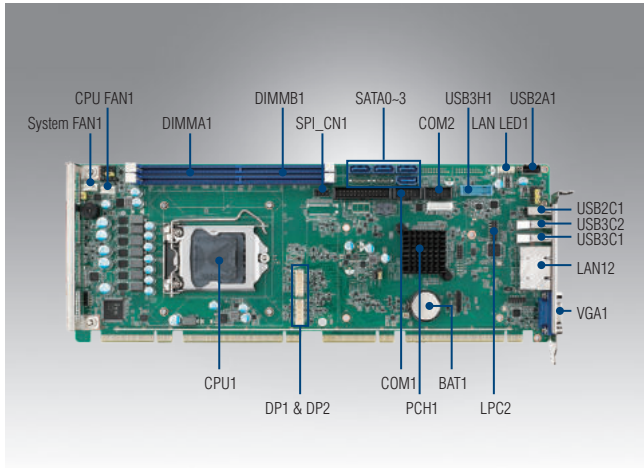


PCE-5032

LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3/Pentium/Celeron System Host Board with DDR4, SATA 3.0, USB 3.2, Dual GbE, and Dual Displays



Features

- Intel® Core™ i9/i7/i5/i3 LGA1200 processor with H420E chipset
 - Up to 64 GB of dual-channel (non-ECC) DDR4 2666/2933 MHz
 - PCIe 3.0, USB 3.2, and SATA 3.0 slots
 - Supports VGA and DVI-D/DP display (with optional cable)
 - Supports Advantech's LPC modules, SUSI 4.0, and embedded software APIs
- Note: Legacy platform is not supported.

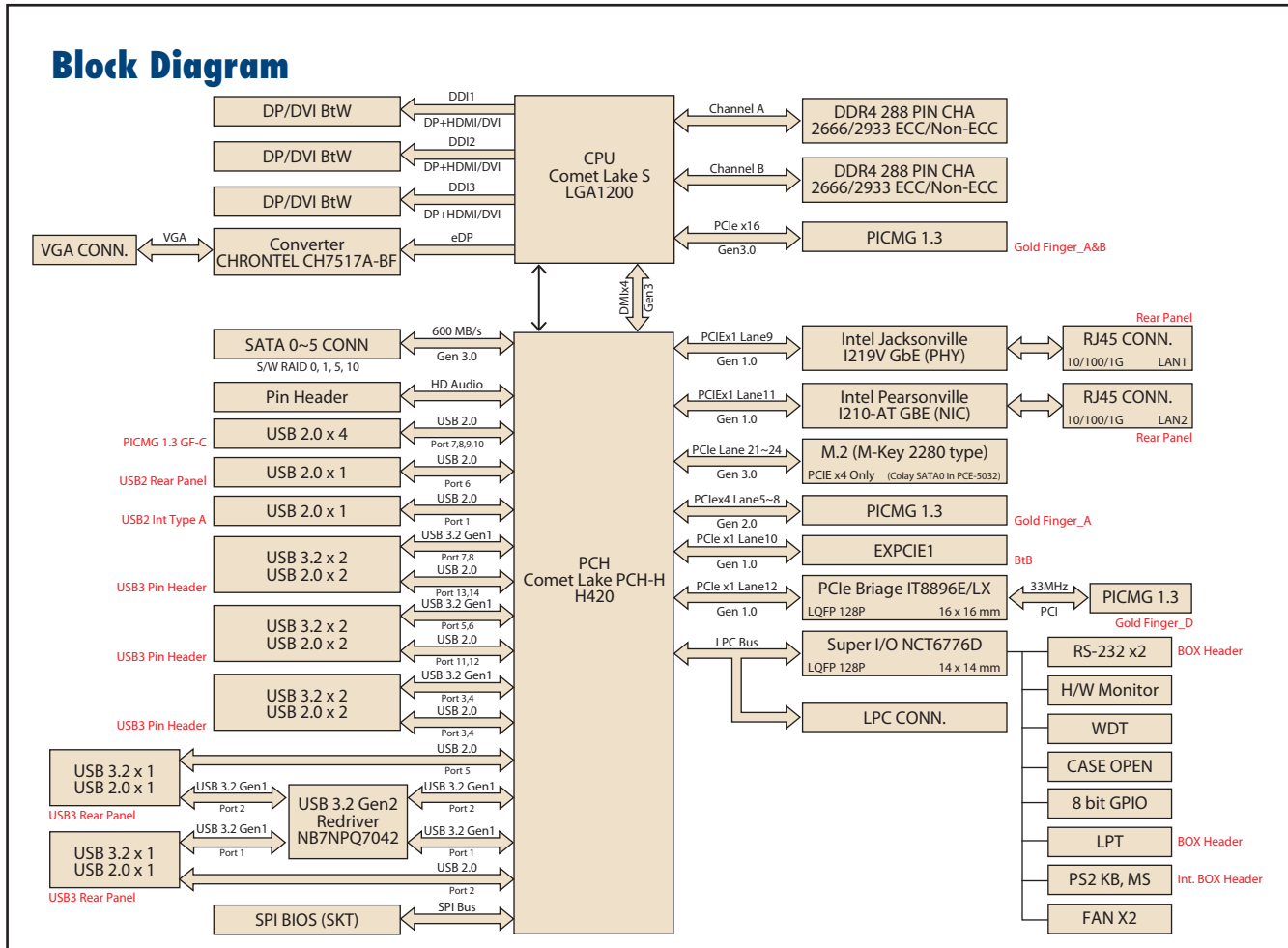
Quiet

CE FCC

Specifications

| | | | | | | | | | | | | | | |
|--------------------|-----------------------|--|-----------|------------|------------|-----------|-----------|-----------|------------|-----------|------------|--|---------|---------|
| Processor System | CPU | i9-10900K | i9-10900E | i9-10900TE | i7-10700TE | i7-10700E | i5-10500E | i5-10500E | i5-10500TE | i3-10100E | i3-10100TE | G6400E | G5900E | G5900TE |
| | Speed | 3.7GHz | 2.80GHz | 1.80GHz | 2.00GHz | 2.90GHz | 3.10GHz | 3.10GHz | 2.30GHz | 3.60 GHz | 2.30GHz | 3.80GHz | 3.20GHz | 3.00GHz |
| | L3 Cache | 20MB | 20MB | 20MB | 16MB | 16MB | 12MB | 12MB | 12MB | 6MB | 6MB | 4MB | 2MB | 2MB |
| | Cores | 10 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 4 | 4 | 2 | 2 | 2 |
| | TDP | 125W | 65W | 35W | 35W | 65W | 65 W | 65W | 35W | 65W | 35W | 58W | 58W | 35W |
| | Socket | LGA 1200 | | | | | | | | | | | | |
| | Chipset | Intel H420E | | | | | | | | | | | | |
| BIOS | AMI 128Mbit SPI Flash | | | | | | | | | | | | | |
| Bus | PCI-Express | 1 x PCIe x16 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 | | | | | | | | | | | | |
| | Max. Capacity | up to 64GB (based on CPU) | | | | | | | | | | | | |
| | Socket | 2 x DDR4 288-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 @ 60MHz | | | | | | | | | | | | |
| | DVI-D | Supports resolutions of up to 1920 x 1200 @ 60MHz | | | | | | | | | | | | |
| | Display Port | Supports resolutions of up to 4096 x 2160 @ 60MHz | | | | | | | | | | | | |
| Ethernet | Dual Display | CRT+DP/CRT+DVI | | | | | | | | | | | | |
| | Interface | 10/100/1000 Mbps | | | | | | | | | | | | |
| | Controller | LAN 1: Intel® I219-V LAN 2: Intel® I210-AT | | | | | | | | | | | | |
| Rear I/O | Connector with LED | RJ45 x 2 | | | | | | | | | | | | |
| | USB 3.2 (Gen1) | 2 | | | | | | | | | | | | |
| | USB 2.0 | 1 | | | | | | | | | | | | |
| | Ethernet | 2 | | | | | | | | | | | | |
| Internal Connector | VGA | 1 | | | | | | | | | | | | |
| | USB | 5 x USB 2.0 (1 USB Type A + 4 on backplane), 2 x USB 3.2 | | | | | | | | | | | | |
| | SATA | 4 | | | | | | | | | | | | |
| | DP/DVI-D | 1 (Pin header) | | | | | | | | | | | | |
| | COM | 2 | | | | | | | | | | | | |
| Watchdog Timer | GPIO | 8 bits | | | | | | | | | | | | |
| | Output | System reset | | | | | | | | | | | | |
| Miscellaneous | Interval | Programmable 1-255 sec | | | | | | | | | | | | |
| | Audio | Intel® High Definition audio interface (requires audio extension module PCA-AUDIO-HDB1E) | | | | | | | | | | | | |
| Power Requirement | Test Environment | Intel Core i CPU, Memory 2" DDR4 2666U 32GB | | | | | | | | | | | | |
| | Voltage | +3.3V, 5V, 12V | | | | | | | | | | | | |
| | Current | 1.67A, 6.34A, 9.76A | | | | | | | | | | | | |
| Environment | Operating | | | | | | | | | | | Non-operating | | |
| | Temperature | 0 ~ 60 °C (dependent on CPU and cooler solution) | | | | | | | | | | -40 ~ 85 °C | | |
| | Humidity | 40 °C @ 85% relative humidity (non-condensing) | | | | | | | | | | 60 °C @ 95% relative humidity (non-condensing) | | |
| Physical | Dimensions (L x H) | 338 x 122 mm (13.3" x 4.8") | | | | | | | | | | | | |

Block Diagram



Ordering Information

| Part Number | Chipset | Memory | Backplane | Display | USB 3.2 | USB 2.0 | COM | GbE LAN | AMT | SATA | SW RAID | Intelligent System Module Support |
|-----------------|---------|---------|-----------|---------------|---------|---------|-----|---------|-----|------|---------|-----------------------------------|
| PCE-5032G2-00A3 | H420E | Non-ECC | PCE-5BX | VGA + DVI/DP* | 4 | 6 | 2 | 2 | No | 4 | No | 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 |
| 2041513201 | 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 |
| 1700020277-01 | 2-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) |
| 20706WX9HS0099 | PCE-5032 win 10 embedded OS (high-end) |
| 20706WX9VS0103 | PCE-5032 win 10 embedded OS (value) |
| 20706WX9ES0113 | PCE-5032 win 10 embedded OS (entry) |

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

I/O View



PCE-5032G2-00A3