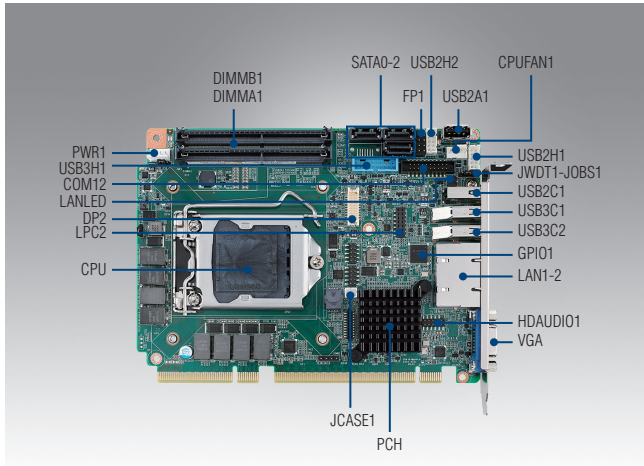


PCE-3032

LGA1200 10th Gen Intel® Core™ i9/i7/i5/i3 Half-size SHB with PCIe 3.0/ Dual Independent Display/Dual GbE LAN/ SATA III/m-SATA/ USB 3.2



CE FCC

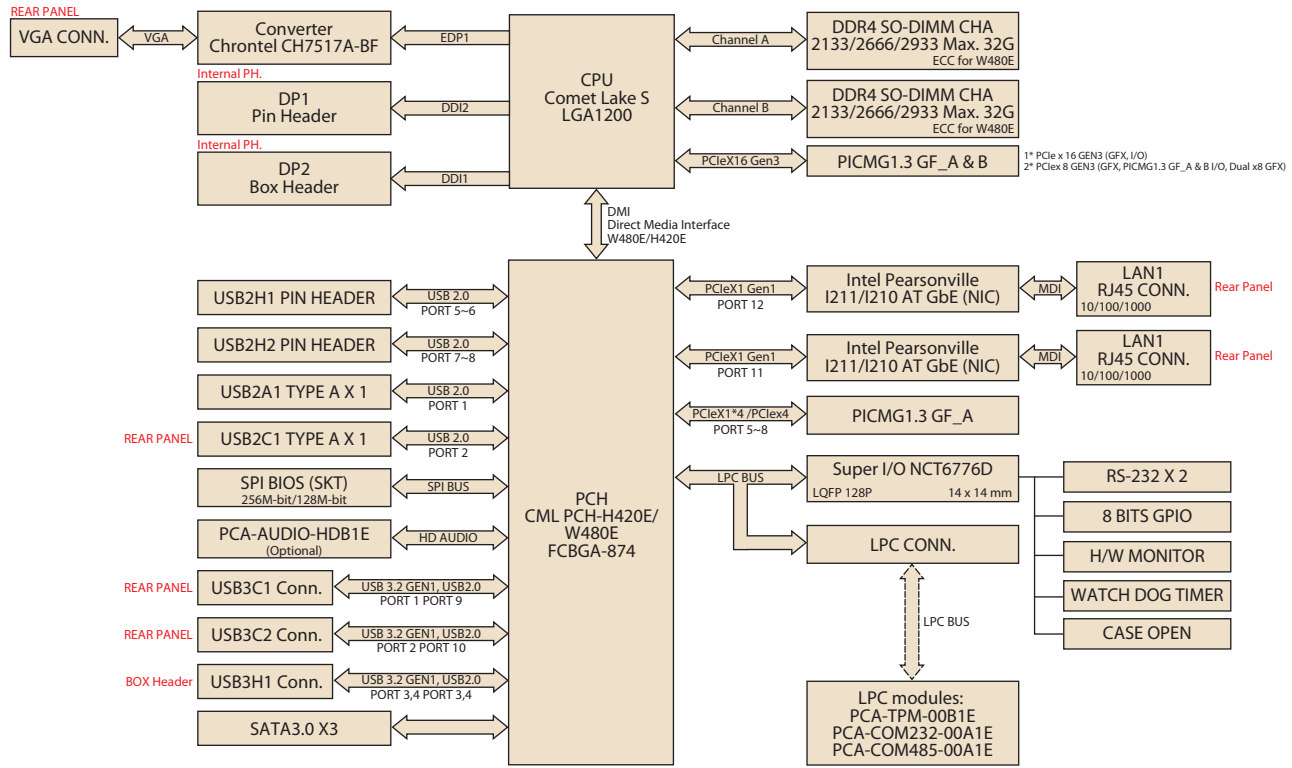
Features

- Complies with PICMG 1.3
- Supports Intel® Core™ i9/i7/i5/i3/Celeron®/Pentium® processor with H420E chipset
- Dual Channel (Non-ECC) DDR4 2666/2933 up to 64 GB
- Supports USB 3.2, SATA III, PCIe 3.0
- Supports CRT and DVI-D/DP (optional) display
- Supports Advantech TPM module (optional)
- Supports WISE-DeviceOn and embedded software APIs

Specifications

| | | I9-10900E | I9-10900TE | I7-10700E | I7-10700TE | I5-10500E | I5-10500TE | I5-10500TE | I3-10100E | I3-10100TE | G6400E | G5900E | G5900TE | | | | |
|--------------------|--------------------------|---|------------|-----------|------------|-----------|------------|------------|-----------|--------------------------------|---------|---------|---------|-------|--|--|--|
| Processor System | CPU | I9-10900E | I9-10900TE | I7-10700E | I7-10700TE | I5-10500E | I5-10500TE | I5-10500TE | I3-10100E | I3-10100TE | G6400E | G5900E | G5900TE | | | | |
| | Speed | 2.80GHz | 1.80GHz | 2.00GHz | 2.90GHz | 3.10GHz | 3.10GHz | 2.30GHz | 3.6GHz | 2.30GHz | 3.80GHz | 3.20GHz | 3.00GHz | | | | |
| | L3 Cache | 20MB | 20MB | 16MB | 16MB | 12MB | 12MB | 12MB | 6MB | 6MB | 4MB | 2MB | 2MB | | | | |
| | Cores | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 4 | 4 | 2 | 2 | 2 | | | | |
| | TDP | 65W | 35W | 35W | 65W | 65W | 65W | 35W | 65W | 35W | 58W | 58W | 35W | | | | |
| | SKU/Chipset | H420E | | | | | | | | | | | | | | | |
| | BIOS | AMI 128Mbit SPI Flash | | | | | | | | | | | | | | | |
| Bus | PCI-Express | One x16 (Gen 3) plus four x1 (Gen 3) to backplane | | | | | | | | | | | | | | | |
| Memory | Technology | Dual channel (Non-ECC) DDR4 2666/2933 up to 64GB | | | | | | | | | | | | | | | |
| | Max. Cap. | 64 GB (32 GB per DIMM) | | | | | | | | | | | | | | | |
| | Socket | DDR4 260-pin SO-DIMM x2 | | | | | | | | | | | | | | | |
| Graphics | Controller | Chipset integrated Intel HD Graphics | | | | | | | | | | | | | | | |
| | VRAM | Shared system memory is subject to OS | | | | | | | | | | | | | | | |
| | VGA | Supports resolution up to 2048 x 1152 pixel at 60Hz | | | | | | | | | | | | | | | |
| | Display Port | Supports resolution up to 4096 x 2160 pixel at 60Hz | | | | | | | | | | | | | | | |
| | Dual Independent Display | VGA+ DVI-D/DP (Optional) | | | | | | | | | | | | | | | |
| Ethernet | Interface | 10/100/1000 Mbps | | | | | | | | | | | | | | | |
| | Controller | LAN 1: Intel i211AT LAN 2: Intel I211AT | | | | | | | | | | | | | | | |
| | Connector with LED | RJ-45 x 2 | | | | | | | | | | | | | | | |
| Rear I/O | USB 3.2 | 2 | | | | | | | | | | | | | | | |
| | USB 2.0 | 1 | | | | | | | | | | | | | | | |
| | Ethernet | 2 | | | | | | | | | | | | | | | |
| | VGA | 1 | | | | | | | | | | | | | | | |
| Internal Connector | USB | 5 USB 2.0 (Pin-header *4 + USB Type A *1); 2 USB 3.2 (Pin header) | | | | | | | | | | | | | | | |
| | SATA | SATA III x3 (600MB/sec) | | | | | | | | | | | | | | | |
| | mini-PCIe | 0 | | | | | | | | | | | | | | | |
| | DVI-D | 1 | | | | | | | | | | | | | | | |
| | DP | 1 | | | | | | | | | | | | | | | |
| | COM | 2 (RS-232) | | | | | | | | | | | | | | | |
| Watchdog Timer | Output | System reset | | | | | | | | | | | | | | | |
| | Interval | Programmable 1-255 sec | | | | | | | | | | | | | | | |
| Miscellaneous | Audio | Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDB1E) | | | | | | | | | | | | | | | |
| Power Requirement | Test Environment | CPU: Intel® Core™ i7-10700E CPU @2.90GHZ, DRAM: 4GB SO-DDR4-2666*2 | | | | | | | | | | | | | | | |
| | Voltage | +V12 | | | | +V5_SB | | | | +V3.3 | | | | +V5 | | | |
| | Current | 4.36A | | | | 0.17A | | | | 1.8A | | | | 2.13A | | | |
| Environment | Temperature/Humidity | Operating | | | | | | | | Non-operating | | | | | | | |
| | | 0 ~ 60 °C (32~140 °F); Depends on CPU frequency and cooler solution | | | | | | | | -40 ~ 85 °C and 60 °C @ 95% RH | | | | | | | |
| Physical | Dimensions (L x H) | Operating humidity: 40 °C @ 85% RH Non-Condensing | | | | | | | | Non-Condensing | | | | | | | |
| | | 172.64 mm x 126.39 mm | | | | | | | | | | | | | | | |

Block Diagram



Ordering Information

| Part Number | PCH | Memory | Backplane | LAN | VGA | DVI-D | DP | COM | SATA III | mini-PCIe | USB 2.0 | USB 3.2 | S/W RAID | AMT |
|-----------------|-------|---------|-----------|-----|-----|-------|-----|---|----------|-----------|---------|---------|----------|-----|
| PCE-3032G2-00A1 | H420E | Non-ECC | PCE-3BXX | 2 | 1 | 1* | 1** | 2 RS-232 4 RS-422/485 or 4 RS-232 (optional)*** | 3 | 0 | 6 | 4 | No | No |

* DVI-D cable (1700021831-01) is optional.

** PCE-SA01-00A1E is required. PCE-SA01-00A1E is compatible with IPC-3026/IPC-6806S/ACP-4D00/ACP-4020, but not compatible with IPC-3012.

*** PCA-COM485-00A1E is required for additional 4 RS422/485; PCA-COM232-00A1E is required for additional 4 RS232.

Packing List

| Part Number | Description | Quantity |
|---------------|---------------------------|----------|
| 1700003194 | Serial ATA HDD data cable | x1 |
| 1700008762 | 2-port COM cable | x1 |
| 1700014398-11 | 4-port USB cable kit | x1 |
| 2041303200 | Startup manual | x1 |

Optional Accessories

| Part Number | Description |
|-----------------------------------|---|
| *PCA-COM485-00A1E | 4 x RS-422/485 module |
| PCA-COM232-00A1E | 4 x RS-232 module |
| PCA-AUDIO-HDB1E | Audio module with Realtek ACL892 |
| PCA-TPM-00B1E | TPM 2.0 module |
| PCE-SA01-00A1E | IO extension module |
| 1700021831-01 | DP to DVI-D cable w/ BKT |
| 1960053065N001 | CPU cooler for 1U Chassis and 55W TDP |
| 1960053207N001: | CPU cooler for 1.5U Chassis and 65W TDP |
| 1960050255N001/ 1960077101N001 | CPU cooler for 2U Chassis and 95W TDP |

*for COM-422 module, BIOS auto-flow need to be set at disable

Bracket View



PCE-3032G2-00A1