

TPC-B200

Modular TPC - Computing Box Module with Intel Apollo Lake Atom and Celeron CPU



Features

- Computing Box powered by Intel® Atom™ E3940/Celeron® J3455 with 4 GB (up to 8GB) SODIMM SDRAM
- Supports two independent video interfaces with picture-in-picture function and up to 100m long signal transmission distance (iLINK technology) (iLINK technology)
- Multiple sized front panel module offering with P-Cap multi-touch sensor (12.1" & 19" w/ robust 5-wire resistive touch)
- 1 x Full-size mini PCIe
- M.2 and SSD expansion
- Supports TPM2.0 hardware security
- Wide Temp. Range -20~60 °C (Atom™ E3940)

Introduction

TPC-B200 computing box modules are powered by Intel® Atom™ E3940/Celeron® J3455 Processors to provide compact and fanless control panel solutions that deliver high-performance computing. With a highly flexible modular design, TPC-B200 allows users to change the panel sizes (12"-23.8").

Specifications

General

- **Certification** BSMI, CCC, CE, FCC Class A, CB/UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 269 x 203 x 30 (mm)
- **Enclosure** Die cast aluminum alloy
- **Mounting** VESA Mount, Desktop, Wall or Panel Mount
- **OS Support** Windows 10 IoT Enterprise LTSC, Linux
- **Security** TPM 2.0 (built-in)
- **Power Input** 24 V_{DC} ± 20%
- **Weight (Net)** 1.8 kg (4 lbs)

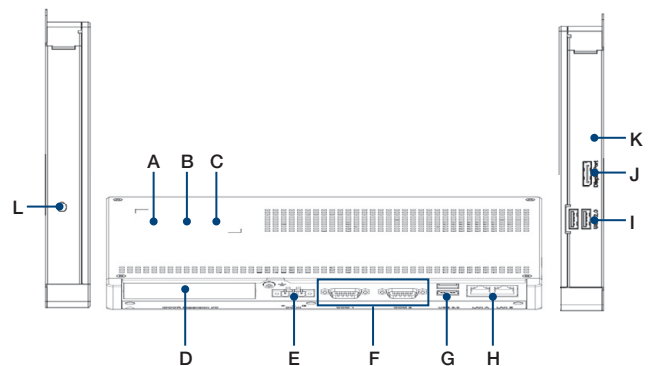
System Hardware

- **CPU** Intel® Atom™ E3940
Intel® Celeron® J3455
- **Memory** 4GB DDR3L SDRAM (up to 8GB)
- **Storage** 1 x M.2 (2242)
1 x 2.5" SATA SSD
- **LAN** 2 x 10/100/1000BASE-T
- **Expansion Slot** 1 x Half-size PCIe (supports GSM 11.11 SIM card)
- **I/O** 2 x RS-232/422/485
2 x USB 3.0, 2 x USB 2.0
1 x Audio line out
1 x DisplayPort 1.2 Out
- **Power Input** 24 V_{DC} ± 20%
- **Security** TPM 2.0 (built-in)

Environment

- **Humidity** 95% RH @ 40°C, non-condensing
- **Ingress Protection** IP66 (for optional panel module with "Panel Mount")
- **Operating Temperature** -20°C~60°C for TPC-B200-E12AE
0°C~60°C for TPC-B200-J12AE
- **Storage Temperature** -20°C~70°C

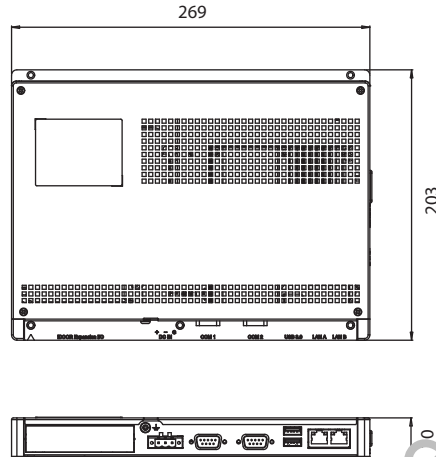
Rear View



- A. SSD
- B. mPCIe
- C. M.2
- D. iDoor
- E. Power Input
- F. RS-232/422/485
- G. USB 3.0 x 2
- H. LAN (10/100/1000) x 2
- I. USB 2.0 x 2
- J. Display Port
- K. Audio out
- L. Antenna opening

Dimensions

Unit: mm



Ordering Information

- **TPC-B200-J12AE** Intel® Celeron® J3455 1.5GHz Processor with 4GB DDR3L
- **TPC-B200-E12AE** Intel® Atom™ E3940 1.6GHz Processor with 4GB DDR3L

| Panel Module P/N | FPM-D12T-BE | FPM-D15T-BE | FPM-D17T-BE | FPM-D19T-BE | FPM-D15W-FBE | FPM-D18W-BE | FPM-D21W-BE | FPM-D24W-BE |
|------------------|-----------------------|---------------------|----------------------|----------------------|-----------------------|----------------------|-------------------|-----------------------|
| Description | 12.1" XGA TFT LED LCD | 15" XGA TFT LED LCD | 17" SXGA TFT LED LCD | 19" SXGA TFT LED LCD | 15.6" FHD TFT LED LCD | 18.5" HD TFT LED LCD | 21.5" FHD LED LCD | 23.8" FHD TFT LED LCD |

Note: Display modules **cannot** work independently. A computing box (TPC-B200/500) or a monitor box (FPM-B700) is compulsory to operate the display module.

Packing List

| Item | Part No. | Description | Qty |
|-----------------|---------------|---|-----|
| Grounding cable | 1703011001-11 | A Cable G-TEM 4.3 100CM C=GR/Y | 1 |
| Plug-In Block | 1652007930-01 | Plug-In Block 1x3P/5.08mm/PA66/FVA | 1 |
| Warranty | 2190000902 | CARDBOARD-WARRANTY REV. A2 | 1 |
| BOX Fix Screw | 1930000686 | Screw M3x5L S/S D=5 H=1.3 (2+) ST Ni NK | 5 |
| iDoor Screw | 1930002161 | Screw M3x4.0(10.0)L R/S D=5.3 H=2.2+ ST BZn | 2 |
| HDD Screw | 1930001361 | Screw M3x4L S/S D=5 H=1.2 (2+) ST Ni NK | 4 |

Optional Accessories

| Part Number | Description |
|-------------------|--|
| PCM-24S2WF-CE | 802.11 a/b/g/n/ac 2T2R w/BT4.1, Intel AC9260 |
| PWR-247-DE | Power Adapter (60W, 24V) for TPC-B200 & FPM-B700 |
| 20703WX9ES0041 | Win10 IoT Ent 2019 LTSC Entry for TPC-B200 |
| 20703WX6ES0005 | Win10 IoT Ent 2016 LTSC Entry for TPC-B200 |
| 20703AI0NS0011 | Android 8.1 for TPC-B200 |
| TPC-5000T-VMKE | VESA Kit for TPC-B200, B500 & FPM-B700 |
| TPC-RUSB-W10LTSBE | Recovery USB Drive for TPC-B200 |
| 1702002600 | Power cable (US) 1.8 M |
| 1702002605 | Power cable (EU) 1.8 M |
| 1702031801 | Power cable (UK) 1.8 M |
| 1700000596 | Power cable (CN/AU) 1.8 M |

Note:

*the Bracket, Coaxial Cable and Antenna listed above are all needed for TPC-B200 to equip with Wi-Fi/BT feature; for TPC-B500, "Coaxial Cable" is not required.