

TPC-B500 TPC-B200 FPM-B700

Computing/Monitor Box Modules with 6th Gen. Intel® Core™/Celeron®/Atom® Processor



Features

- TPC-B200: Computing Box powered by Intel® Celeron® J3455/ Atom® E3940 with 4GB SODIMM
- TPC-B500: Computing Box powered by Intel® Core™ i3-6100U/i5-6300U/i7-6600U/ Celeron® 3955U with 8GB SODIMM
- FPM-B700: Monitor Box with 2 flexible I/O slots to accommodate FPM-M700 I/O modules for video signal or long distance transmission
- Computing Box supports PCIe, mini PCIe, M.2, and SSD expansion
- Monitor Box supports two independent video interfaces with picture-in-picture (PiP) functionality and a signal transmission distance of up to 100 m via iLINK technology
- Front panel modules in varying size equipped with P-CAP multi-touch sensors (the 12.1" module features 5-wire resistive touch control)



Introduction

Advantech's TPC computing box modules are powered by a 6th generation Intel® Core™/Celeron® processor. When combined with an industrial-grade LED LCD module, the TPC series provides compact and fanless control panel solutions that support high-performance computing. The FPM monitor box's flexible modular design allow users to alter the video interfaces, simultaneously support two controllers via PiP technology, and extend the signal transmission distance to 100 m via iLINK technology.

Specifications

Series	TPC-2000		TPC-5000				FPM-7002
Module P/Ns	TPC-B200-J12AE	TPC-B200-E12AE	TPC-B500-6C2AE	TPC-B500-633AE	TPC-B500-653AE	TPC-B500-673AE	FPM-B700-AE
CPU	Intel® Celeron® J3455 1.50GHz	Intel® Atom® E3940 1.60 GHz	6th Gen Intel® Celeron® 3955U 2.00 GHz	6th Gen Intel® Core™ i3-6100U 2.30 GHz	6th Gen Intel® Core™ i5-6300U 2.40 GHz	6th Gen Intel® Core™ i7-6600U 2.60 GHz	-
Memory	4GB DDR3L SDRAM (up to 8GB)		4GB DDR4 SDRAM (up to 16GB)	8GB DDR4 SDRAM (up to 32GB)	8GB DDR4 SDRAM (up to 32GB)	8GB DDR4 SDRAM (up to 32GB)	-
Storage	1 x M.2 (2242) 1 x 2.5" SATA SSD		1 x M.2 (2280) SATA 1 x 2.5" SATA SSD 1 x CFast (optional via iDoor module)				-
LAN	2 x 10/100/1000 BASE-T (2 x Intel® I210)		3 x 10/100/1000BASE-T (2 x Intel® I210, 1 x Intel® I219)				See ordering information, FPM-M700
Expansion Slots	1 x Full-size mini PCIe (supports GSM 11.11 SIM card)		1 x Half-size PCIe* 2 x Full-size mini PCIe				
I/O	2 x RS-232/422/485 2 x USB 3.0 2 x USB 2.0 1 x Audio line out DisplayPort 1.2 Out x 1		1 x RS-232, 1 x RS-232/422/485 2 x USB 3.0, 2 x USB 2.0 1 x Audio line out DisplayPort 1.2 Out x 1				
Power Input	24 V _{DC} ± 20%		24 V _{DC} ± 20%				24 V _{DC} ± 20%
Operating Temperature	0°C-60°C	-20°C-60°C	0°C-60°C				0°C-60°C
OS	Windows 10 IoT Enterprise LTSC/LTSC		Microsoft® Windows WS7P Windows 10 IoT Enterprise LTSC/LTSC				-
Security	TPM 2.0 (built-in)		TPM 2.0 (built-in)				-

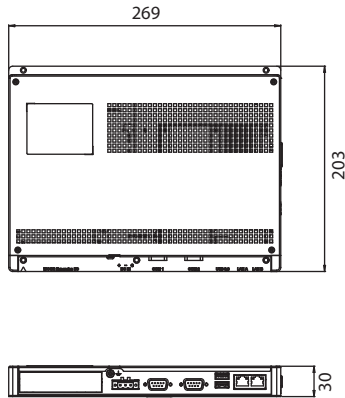
*Max. Dimension of PCIe card for TPC-B500: 167.65 mm x 64.41 mm x 14.48 mm (D x W x H)

Computing/Monitor Box Modules

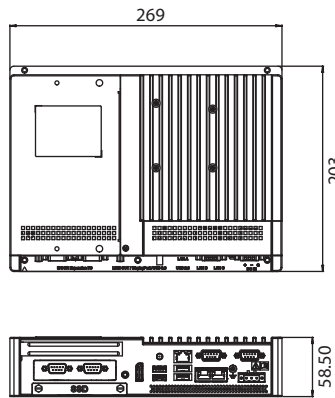
Dimensions

Unit: mm

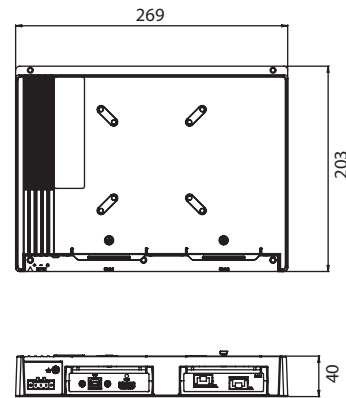
TPC-B200



TPC-B500



FPM-B700



Ordering Information

Panel Module P/N	FPM-D12T-BE	FPM-D15T-BE	FPM-D17T-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	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.

Configurable Rear Computing Box

Box Module P/N	Description
TPC-B200-J12AE	Intel® Celeron® J3455 1.50 GHz processor with 4 GB DDR3L
TPC-B200-E12AE	Intel® Atom™ E3940, 1.60 GHz, processor with 4GB DDR3L
TPC-B500-6C2AE	Intel® Celeron® 3955U 2.00 GHz processor with 4 GB DDR4
TPC-B500-633AE	Intel® Core™ i3-6100U 2.30 GHz processor with 8 GB DDR4
TPC-B500-673AE	Intel® Core™ i7-6600U 2.60 GHz processor with 8 GB DDR4
TPC-B500-653AE	Intel® Core™ i5-6300U 2.40 GHz processor with 8 GB DDR4
TPC-B200-J12A0	TPC-B200-J12AE without Audio function
TPC-B200-E12A0	TPC-B200-E12AE without Audio function
TPC-B500-633A0	TPC-B500-633AE without Audio function
TPC-B500-653A0	TPC-B500-653AE without Audio function
TPC-B500-673A0	TPC-B500-673AE without Audio function

Configurable Rear Monitor Box

Box Module P/N	Description
FPM-B700-AE	Monitor Rear Box

Note: FPM-B700 does not include an I/O module. I/O module (FPM-M700) is necessary for video input and touch signal connection.

Configurable I/O Module for Monitor Box

I/O Module P/N	Description
FPM-M700-HDAE	HDMI + USB Touch Module
FPM-M700-DPAE	Display + USB Touch Module
FPM-M700-TRAE	iLINK Tx + Rx Module
FPM-M700-RXAE	iLINK Rx Module

Note: Up to two I/O modules can be installed onto FPM-B700-AE.

Optional Accessories

Part Number	Description
EWM-W157H01E	Wi-Fi module 802.11 a/b/g/n/ac, RTL8821AE, 1T1R, BT4.0
9656EWMG00E	Bracket for Half-size miniPCIe Wi-Fi/BT Module
1750006043	Coaxial Cable R/P SMA (F) to MHF 1.32 150mm
1750008717-01	Wi-Fi/BT Antenna Dipole D.B 2.4/5G WIFI 3dBi SMA/M-R BLK
PWR-247-DE	Power Adapter (60W, 24V) for TPC-B200 & FPM-B700
96PSA-A120W24T2-3	Power Adapter (120W, 24V) for TPC-B500
20703WX9ES0041	Win10 IoT Ent 2019 LTSC Entry for TPC-B200
20703WX9VS0005	Win10 IoT Ent 2019 LTSC Value for TPC-B500-6C2AE/633AE/653AE
20703WX9HS0005	Win10 IoT Ent 2019 LTSC High End for TPC-B500-673AE
20703WX6ES0004	Win10 IoT Ent 2016 LTSB Entry for TPC-B200
20703AIONS0011	Android 8.1 for TPC-B200
20703WX6VS0013	Win10 IoT Ent 2016 LTSB Value for TPC-B500-6C2AE/633AE/653AE
20703WX6HS0017	Win10 IoT Ent 2016 LTSB High End for TPC-B500-673AE
TPC-5000T-VMKE	VESA Kit for TPC-B200, B500 & FPM-B700
TPC-RUSB-W10LTSBE	Recovery USB Drive for TPC-B200
TPC-RUSB-W10LTSBV	Recovery USB Drive for TPC-B500-6C2AE/633AE/653AE
TPC-RUSB-W10LTSBH	Recovery USB Drive for TPC-B500-673AE
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.