

fit-PC Intense 3

Specifications



Overview

fit-PC Intense 3 has the proven ruggedized form-factor of fit-PC Intense 2 with improved passive cooling to enable this 7th generation Intel® Core™-i7 to operate at an industrial temperature range of -40°C to 70°C.

The standard IPC3 features include up to 32 GB RAM, multiple storage devices spanning M.2, mSATA and 2.5", dual 4K display interfaces, dual Gbit Ethernet and support for WiFi and cellular data communication. A key feature of IPC3 is support for Function and Connectivity Extension (FACE) Modules – internal extension cards that add special functionality on top of the basic configuration. FACE Modules allow seamless enhancement of the functionality of IPC3 and other Computab PCs, like fitlet-T and Airtop. The trio of FACE Modules launched with IPC3 are FM-OPLN, FM-POE 1.1 and FM-EBP.

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System	IPC3 i5 8 GB RAM	IPC3 i7 16 GB RAM	IPC3 i7 Barebone
Part Number	IPC3-C7200-D8-WACB-FMUSB3	IPC3-C7500-D16-WACB-FMUSB3	IPC3-C7600-TPM-D16-WACB-FMUSB3
Block Diagram			
Current HW Revision	2.0	2.0	2.0
Long Term Availability	2020 ⁶	2020 ⁶	2020 ⁶
Processor			
Type	Intel 7th Gen Core i5-7200U Processor (Kaby Lake)	Intel 7th Gen Core i7-7500U Processor (Kaby Lake)	Intel 7th Gen Core i7-7600U Processor (Kaby Lake)
Cores	64-bit dual core	64-bit dual core	64-bit dual core
Clock speed	2.5GHz (turbo boost up to 3.1GHz)	2.7GHz (turbo boost up to 3.5GHz)	2.7GHz (turbo boost up to 3.5GHz)
TDP	15W	15W	15W
Chipset	Intel Mobile PCH (MCP package)	Intel Mobile PCH (MCP package)	Intel Mobile PCH (MCP package)
Memory			
Supported	Not upgradeable	Not upgradeable	Not upgradeable
Installed	8 GB DDR4 (single SODIMM)	16 GB DDR4 (2x SODIMM)	16 GB DDR4 (2x SODIMM)
Storage			
Supported	1x SATA up to 6 Gbps (SATA 3.0) for internal 2.5" HDD/SSD 1x M.2 M-key 2280 (NVME 2x PCIe / SATA3 6 Gbps)	1x SATA up to 6 Gbps (SATA 3.0) for internal 2.5" HDD/SSD 1x M.2 M-key 2280 (NVME 2x PCIe / SATA3 6 Gbps)	1x SATA up to 6 Gbps (SATA 3.0) for internal 2.5" HDD/SSD 1x M.2 M-key 2280 (NVME 2x PCIe / SATA3 6 Gbps)
Installed	Not installed	Not installed	Not installed
Graphics			
GPU	Intel HD 620 Graphics Dual display mode supported	Intel HD 620 Graphics Dual display mode supported	Intel HD 620 Graphics Dual display mode supported
Display Interface 1	HDMI 1.4 up to 4096 x 2304 @ 24 Hz	HDMI 1.4 up to 4096 x 2160 @ 30 Hz	HDMI 1.4 up to 4096 x 2160 @ 30 Hz
Display Interface 2	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz
Display Interface 3	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz (mini-DP)	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz (mini-DP)	DisplayPort 1.2 up to 4096 x 2304 @ 60 Hz (mini-DP)
Discrete Graphics	N/A	N/A	N/A
Audio			
Codec	Realtek ALC886 HD audio codec	Realtek ALC886 HD audio codec	Realtek ALC886 HD audio codec
Audio Output	Analog stereo output Digital 7.1+2 channels S/PDIF output 3.5mm jack	Analog stereo output Digital 7.1+2 channels S/PDIF output 3.5mm jack	Analog stereo output Digital 7.1+2 channels S/PDIF output 3.5mm jack
Audio Input	Analog stereo Microphone input Digital S/PDIF input 3.5mm jack	Analog stereo Microphone input Digital S/PDIF input 3.5mm jack	Analog stereo Microphone input Digital S/PDIF input 3.5mm jack

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Networking			
LAN	2x GbE LAN ports LAN1: Intel I219 GbE PHY (MAC integrated into the chipset) (RJ-45) LAN2: Intel I211 GbE controller (RJ-45) LAN3-6: N/A	2x GbE LAN ports LAN1: Intel I219 GbE PHY (MAC integrated into the chipset) (RJ-45) LAN2: Intel I211 GbE controller (RJ-45) LAN3-6: N/A	2x GbE LAN ports LAN1: Intel I219 GbE PHY (MAC integrated into the chipset) (RJ-45) LAN2: Intel I211 GbE controller (RJ-45) LAN3-6: N/A
Wireless	WLAN 802.11ac (2.4/5GHz dual band) Bluetooth 4.0	WLAN 802.11ac (2.4/5GHz dual band) Bluetooth 4.0	WLAN 802.11ac (2.4/5GHz dual band) Bluetooth 4.0
Connectivity			
USB	4x USB 3.0 2x USB 2.0	4x USB 3.0 2x USB 2.0	4x USB 3.0 2x USB 2.0
Serial	3x Serial communication ports COM0: 4-wire RS232 via mini serial connector COM1: 4-wire RS232 via mini serial connector COM2: 2-wire RS232 via mini serial connector	3x Serial communication ports COM0: 4-wire RS232 via mini serial connector COM1: 4-wire RS232 via mini serial connector COM2: 2-wire RS232 via mini serial connector	3x Serial communication ports COM0: 4-wire RS232 via mini serial connector COM1: 4-wire RS232 via mini serial connector COM2: 2-wire RS232 via mini serial connector
SD	N/A	N/A	N/A
Special I/O	1x micro SIM slot (6 pins) ⁴	1x micro SIM slot (6 pins) ⁴	1x micro SIM slot (6 pins) ⁴
Expansion	M.2 E-key M.2 B-key + SIM-card FACE Modules	M.2 E-key M.2 B-key + SIM-card FACE Modules	M.2 E-key M.2 B-key + SIM-card FACE Modules
Advanced Technologies			
vPRO	No	No	Yes
AMT	No	No	Yes
CPU Virtualization	Yes	Yes	Yes
AES	Yes	Yes	Yes
Special Functionality	Auto-On Wake-on-LAN Wake-on-Timer PXE Boot Watchdog Remote power button	Auto-On Wake-on-LAN Wake-on-Timer PXE Boot Watchdog Remote power button	Auto-On Wake-on-LAN Wake-on-Timer PXE Boot Watchdog TPM Remote power button
Bootloader			
Vendor	American Megatrends Inc.	American Megatrends Inc.	American Megatrends Inc.
Features	AptioV UEFI BIOS Secure Flash	AptioV UEFI BIOS Secure Flash	AptioV UEFI BIOS Secure Flash
Operating System			
Supported	Windows 10 Linux	Windows 10 Linux	Windows 10 Linux
Official Linux	Linux Mint 18 Cinnamon (64-bit)	Linux Mint 18 Cinnamon (64-bit)	Linux Mint 18 Cinnamon (64-bit)
Installed	Not installed	Not installed	Not installed

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Operating Conditions			
Input Voltage	Unregulated 10 – 15VDC input ¹	Unregulated 10 – 15VDC input ¹	Unregulated 10 – 15VDC input ¹
Power Consumption	6W – 24W	6W – 24W	6W – 24W
Operating Temperature	1. Commercial: 0°C to 45°C 2. Extended (TE): -20°C to 70°C 3. Industrial (TI): -40°C to 70°C	1. Commercial: 0°C to 45°C 2. Extended (TE): -20°C to 70°C 3. Industrial (TI): -40°C to 70°C	1. Commercial: 0°C to 45°C 2. Extended (TE): -20°C to 70°C 3. Industrial (TI): -40°C to 70°C
Relative Humidity	10% to 90% (operation) 5% to 95% (storage)	10% to 90% (operation) 5% to 95% (storage)	10% to 90% (operation) 5% to 95% (storage)
MTTF	> 100,000 hours	> 100,000 hours	> 100,000 hours
Enclosure			
Material	Die Cast Aluminum	Die Cast Aluminum	Die Cast Aluminum
Cooling	Passive Cooling Fanless Design	Passive Cooling Fanless Design	Passive Cooling Fanless Design
Dimensions	19cm x 16cm x 4cm	19cm x 16cm x 4cm	19cm x 16cm x 4cm
Weight	1015gr	1015gr	1015gr
Package			
In the Box	1. IPC3 computer 2. Power supply: input 100-240VAC 50/60Hz, 60W output 12VDC 5A, DC plug lock; North American AC cord 3. Video HDMI to DVI adapter 4. Audio 3.5mm to RCA cable 5. WiFi 2.4GHz/5GHz band 2 antennas (in some models) 6. Mini-serial to DB9-male adapter cable	1. IPC3 computer 2. Power supply: input 100-240VAC 50/60Hz, 60W output 12VDC 5A, DC plug lock; North American AC cord 3. Video HDMI to DVI adapter 4. Audio 3.5mm to RCA cable 5. WiFi 2.4GHz/5GHz band 2 antennas (in some models) 6. Mini-serial to DB9-male adapter cable	1. IPC3 computer 2. Power supply: input 100-240VAC 50/60Hz, 60W output 12VDC 5A, DC plug lock; North American AC cord 3. Video HDMI to DVI adapter 4. Audio 3.5mm to RCA cable 5. WiFi 2.4GHz/5GHz band 2 antennas (in some models) 6. Mini-serial to DB9-male adapter cable
Warranty	5 Years	5 Years	5 Years
Notes	1. Nominal input voltage: 12V 4. For use with Cellular Modem kit 5. Supported on LAN1 only 6. The product will be available after 2020 with similar or better CPU	1. Nominal input voltage: 12V 4. For use with Cellular Modem kit 5. Supported on LAN1 only 6. The product will be available after 2020 with similar or better CPU	1. Nominal input voltage: 12V 4. For use with Cellular Modem kit 5. Supported on LAN1 only 6. The product will be available after 2020 with similar or better CPU

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