

SPC-4020

Intel® Atom™ E3950 Processor (Apollo Lake) Ultra-compact Fanless Embedded Box PC, 2 LAN, 6 USB, 4 COM w/2 Isolated, 1 M.2 Socket, 16 Isolated DIO, -40°C to 85°C, Rugged, High Performance, Extended Temperature



Features

- Quad Core Intel Atom® x7-E3950 SoC (Apollo Lake-I) supports lower power consumption
- Fanless, -40°C to 85°C Operating Temperature
- Supports HDMI & VGA Dual Display, up to 4K resolution
- DDR3L 1866MHz memory supports up to 8GB
- 2 GigE LAN support IEEE 1588 (PTP)
- 4 COM RS-232/422/485 with 2 Isolated
- 16 Isolated DIO, 6 USB, 1 SIM Socket
- 3 Mini PCIe, 1 SATA III, 1 M.2
- SIM Socket for WiFi/4G/3G/LTE/GPRS/UMTS
- 12V DC Power Input
- TPM 2.0 supported



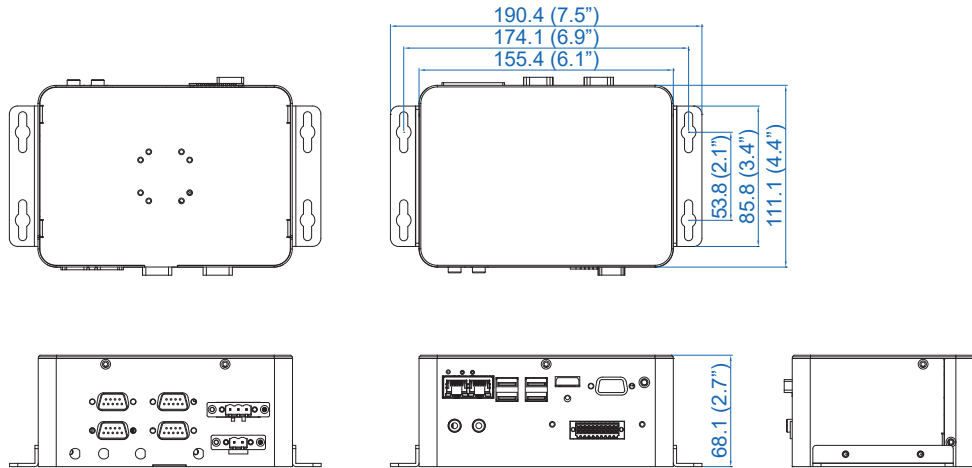
Specifications

System	
Processor	Intel Atom® x7-E3950 Processor (Apollo Lake-I)
Chipset	Intel® SoC (Apollo Lake)
BIOS	AMI
SIO	IT8786E
Memory	1 DDR3L 1866MHz SO-DIMM, up to 8GB
I/O Interface	
Serial	4 COM RS-232/422/485 with 2 Isolated
USB	<ul style="list-style-type: none"> ▪ 2 USB 3.0 (External) ▪ 4 USB 2.0 (2 External, 2 Internal)
DIO	16 Isolated DIO : 8 DI, 8 DO
LED	Power, HDD, Wireless
SIM Card	1 Internal SIM Card Socket
Expansion	
Mini PCIe	3 Mini PCIe Socket : <ul style="list-style-type: none"> ▪ 1 Mini PCIe for PCIe/USB/SIM Card ▪ 1 Mini PCIe for PCIe/USB/Optional mSATA ▪ 1 Mini PCIe for PCIe/USB
M.2	1 M.2 Key B Socket
Graphics	
Graphics Processor	Intel® HD Graphics 505
Interface	<ul style="list-style-type: none"> ▪ HDMI : Up to 3840 x 2160 @30Hz (Lockable) ▪ VGA : Up to 1920 x 1440 @60Hz
Storage	
SATA	1 SATA III (6Gbps)
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	1 2.5" SSD/HDD Bracket (Internal)
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
Ethernet	
LAN 1	Intel® I210 GigE LAN supports IEEE 1588
LAN 2	Intel® I210 GigE LAN supports IEEE 1588

Power	
Power Input	Single 12V DC Power Input
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Remote Switch	2-pin Terminal Block
Others	
TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 10, Linux
Mechanical	
Dimensions (W x L x H)	155mm x 110mm x 68mm (6.1" x 4.3" x 2.7")
Weight	1.1 kg (2.43 lb)
Mounting	<ul style="list-style-type: none"> ▪ Wallmount by mounting bracket ▪ DIN Rail Mount (Optional) ▪ 2U Rackmount (Optional)
Environment	
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% at 85°C
EMC	CE, FCC, EN50155, EN50121-3-2

Dimensions

Unit : mm/ inch



Front I/O



Rear I/O



Order Information

SPC-4020	SPC-4000, onboard Intel Atom® E3950, 2 GigE LAN, 6 USB, 4 COM w/2 Isolated, 1 SIM, 1 M.2, 16 Isolated DIO, Single 12V DC-in
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Accessories

DDR3L 8G	Certified DDR3L 8GB 1866MHz SO-DIMM
DDR3L 4G	Certified DDR3L 4GB 1866MHz SO-DIMM
PWA-160W-WT	160W, 12V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
PWA-120W	120W, 12V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
TMK2-20P-100	Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK2-20P-500	Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB-TMBK-20P	Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth	WiFi & Bluetooth Module with Antenna