

SPC-7100

11th Gen Intel® Core™ i7/i5/i3 Processor (Tiger Lake) Ultra-Compact Fanless Embedded Box PC, 1 GigE LAN, 1 2.5 GigE LAN, 10G USB, 2 COM, 1 SIM Socket, 1 SSD Bracket, 9V to 55V DC, High Performance, Rugged, -40°C to 75°C Extended Temperature



Features

- Quad-core 11th Gen Intel® Core™ i7/i5/i3 and Celeron Processor (Tiger Lake UP3), up to 28W TDP
- Compact & Fanless design, up to -40°C to 75°C operating temperature
- DDR4 3200MHz memory, up to 32GB
- Dual DisplayPort display, up to 4K resolution
- Multiple USB supports up to 10Gbps data transfer
- 1 2.5GigE LAN supports Intel® Time Sensitive Networking (TSN) for real-time data synchronization
- 1 GigE LAN supports iAMT, TPM 2.0 supported
- 9V to 55V wide range DC Power Input, Ignition Control
- SIM Socket for 5G/WiFi/4G/3G/LTE/GPRS/UMTS
- Optional supports full function SUMIT A, B expansions
- Optional VHUB One-Stop AIoT Solution Service supports OpenVINO



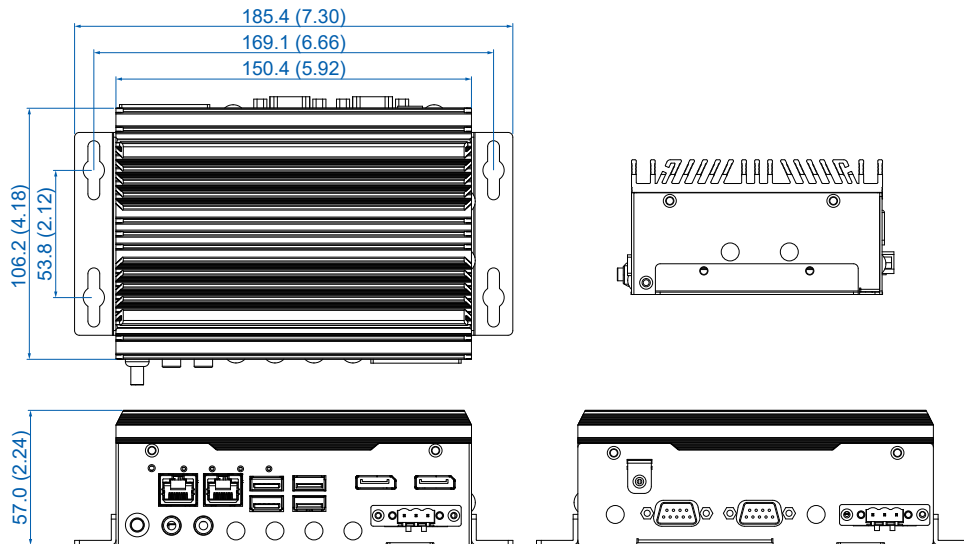
Specifications

System	
Processor	Intel® 11th Generation Core™ i7/i5/i3/Celeron® Processor (Tiger Lake UP3)
Chipset	Intel® SoC
BIOS	AMI
SIO	IT8786E
Memory	1 DDR4 3200MHz Memory, up to 32GB
I/O Interface	
Serial	2 COM RS-232/422/485 (ESD 8kV)
USB	<ul style="list-style-type: none"> ▪ 2 USB 3.1 (External) ▪ 2 USB 2.0 (External) ▪ 2 USB 2.0 (Internal)
LED	Power, HDD, WWAN, WLAN
SIM Card	1 External Nano SIM Card Socket
Expansion	
M.2	<ul style="list-style-type: none"> ▪ 1 M.2 Key B Socket (3042/3052) ▪ 1 M.2 Key E Socket (2230)
SUMIT A, B	2 SUMIT Slot (Optional, with customized chassis)
Graphics	
Graphics Processor	Intel® Iris® X ^e Graphics
Interface	Up to 2 independent displays : 2 DisplayPort : Up to 4096 x 2304 @60Hz
Storage	
SATA	1 SATA III (6Gbps)
M.2	1 M.2 Key B Socket (2260)
Storage Device	1 Internal 2.5" SSD/HDD Bracket
Audio	
Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
Ethernet	
LAN 1	Intel® I219LM Gigabit LAN supports iAMT 14.0
LAN 2	Intel® I225 supports 2.5 GigE LAN

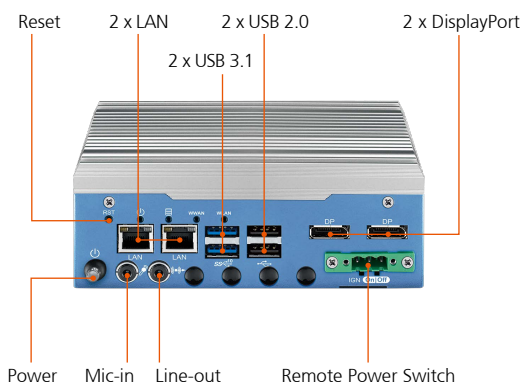
Power	
Power Input	9V to 55V, DC-in
Power Interface	3-pin Terminal Block : V+, V, Frame Ground
Ignition Control	16 Mode Software Ignition Control
Remote Switch	2-pin Terminal Block
Others	
TPM	Infineon SLB9670 supports TPM 2.0, SPI Interface
Watchdog Timer	Reset: 1 to 255 sec./min. per step
Smart Mgmt.	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 10, Linux
Mechanical	
Dimensions (W x L x H)	150.4mm x 106.2mm x 57.0mm (5.92" x 4.18" x 2.24")
Weight	1.3 kg (2.87 lb)
Mounting	<ul style="list-style-type: none"> ▪ Wallmount by mounting bracket ▪ DIN Rail Mount (Optional) ▪ VESA Mount (Optional)
Environment	
Operating Temperature	15W TDP CPU : -40°C to 75°C (-40°F to 167°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% @75°C
Shock	<ul style="list-style-type: none"> ▪ IEC 60068-2-27 ▪ SSD : 50G @wallmount, Half-sine, 11ms
Vibration	<ul style="list-style-type: none"> ▪ IEC 60068-2-64 ▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE, FCC, EN 50155, EN 50121-3-2

Dimensions

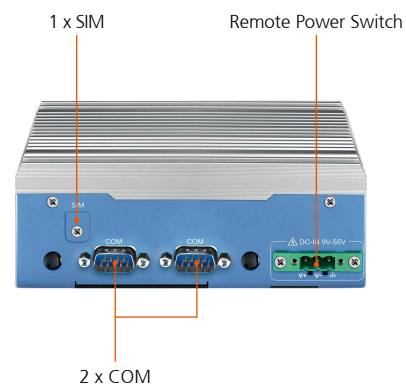
Unit : mm/ inch



Front I/O



Rear I/O



Order Information

SPC-7100-1185G7E	SPC-7100, Intel® Core™ i7-1185G7E w/12W, 15W CPU, 1 GigE LAN, 1 2.5G LAN, 2 USB 3.1, 2 COM, 1 SIM Socket, 1 SSD Bracket, with Heat Sink
SPC-7100-1145G7E	SPC-7100, Intel® Core™ i5-1145G7E w/12W, 15W CPU, 1 GigE LAN, 1 2.5G LAN, 2 USB 3.1, 2 COM, 1 SIM Socket, 1 SSD Bracket, with Heat Sink

Accessories

DDR4 32G	Certified DDR4 32GB 3200MHz RAM
DDR4 16G	Certified DDR4 16GB 3200MHz RAM
DDR4 8G	Certified DDR4 8GB 3200MHz RAM
DDR4 4G	Certified DDR4 4GB 3200/2666/2400 MHz RAM
VESA Mount	VESA Mounting Kit
DIN-RAIL	DIN Rail Kit
PWA-120W	120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
5G Module	5G Module with Antenna
4G Module	4G/GPS Module with Antenna
WiFi & Bluetooth	WiFi & Bluetooth Module with Antenna

Optional Software

VHub AI Developer	AI Development Kit
VHub ROS	AMR Development Kit
VHub EtherCAT	I/O Control Platform