Vecow

SPC-5000/5100

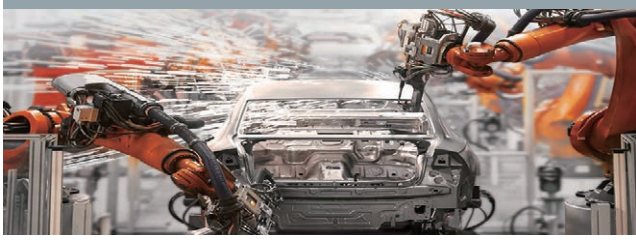
8th Gen Intel® Core™ i7/i5/i3 Processor (Whiskey Lake) Fanless Embedded Box PC

- 8th Generation Intel® Core™ i7/i5/i3 U-series processor (Whiskey Lake) supports up to 40% greater productivity than former generation solution
- Compact size, matches 1U one rack unit of height
- Fanless design, up to -40°C to 85°C operating temperature
- DDR4 2400MHz memory, up to 32GB
- DisplayPort and DVI-D dual display, up to 4K resolution
- 2 Independent GigE LAN, iAMT 12.0 supported
- 4 10G USB 3.1 Gen 2, 2 COM RS-232/422/485
- 9V to 48V wide range DC Power Input
- Ignition Power Control, TPM 2.0
- SIM Socket for WiFi/4G/3G/LTE/GPRS/UMTS
- Expansion : SATA III, mSATA and Mini PCIe
- Optional supports full function SUMIT A, B expansions for multiple 10GigE LAN, 10GigE SFP+, 5G Network, SIM Socket, PoE LAN, Serial Port, GigE LAN, GigE Fiber LAN, or Video Capture
- One-stop SUMIT Expansion Design and Manufacturing Services

Machine Vision

In-Vehicle Comouting

Factory Automation



Intelligent Control

4K SUMIT SIM TPM 9V~48V -40° 85°

EN50155 CE FC RoHS

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Specifications

System

Processor	Quad Core Intel® Core™ i7/i5/i3 U-series Processor (Whiskey Lake)
Chipset	Intel® SoC (Cannon Lake)
BIOS	AMI
SIO	IT8786E
Memory	1 DDR4 2400MHz SO-DIMM, up to 32GB
OS	Windows 10, Linux

Graphics

Graphics Processor	Intel® UHD Graphics 620
Interface	Dual display : - DVI-D : Up to 1920 x 1200 @60Hz - 1 DisplayPort : Up to 4096 x 2304 @60Hz

Ethernet

LAN 1	Intel® I219LM GigE LAN supports iAMT 12.0
LAN 2	Intel® I210 GigE LAN

Audio

Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Storage

SATA	1 SATA III (6Gbps)
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)

I/O Interface

Serial	2 COM RS-232/422/485 (ESD 8KV)
USB	4 USB 3.1 Gen2
LED	Power, HDD
SIM Card	1 SIM Card Socket (Internal)

Expansion

Mini PCIe	2 Mini PCIe Socket : - 1 Full-Size for PCIe/USB/Internal SIM Card - 1 Full-Size for PCIe/USB/Optional mSATA
SUMIT A, B	2 SUMIT Slot (Optional)

Power

Power Input	9V to 48V DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block : On, Off, IGN

Others

TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC 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.

Mechanical

Dimensions	SPC-5000 : 150.4mm x 106.2mm x 44.0mm (5.92" x 4.18" x 1.73") SPC-5100 : 150.4mm x 106.2mm x 62.1mm (5.92" x 4.18" x 2.44")
Weight	SPC-5000 : 0.9 kg (1.98 lb) SPC-5100 : 1.3 kg (2.87 lb)

Environment

Operating Temp.	SPC-5000 : -40°C to 70°C (-40°F to 158°F) SPC-5100 : -40°C to 85°C (-40°F to 185°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 85°C
Shock	- IEC 60068-2-27 - SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	- IEC 60068-2-64 - SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE, FCC, EN50155, EN50121-3-2

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Order Information

Model	CPU	GigE LAN	10G USB	COM	SIM Socket	SSD Bracket	Thermal Solution
SPC-5000-8665U	Core i7-8665UE	2	4	2	1	1	Heat Spreader
SPC-5000-8365U	Core i5-8365UE						
SPC-5000-8145U	Core i3-8145UE						
SPC-5000-4305U	Celeron 4305UE						
SPC-5100-8665U	Core i7-8665UE	2	4	2	1	1	Heat Sink
SPC-5100-8365U	Core i5-8365UE						
SPC-5100-8145U	Core i3-8145UE						
SPC-5100-4305U	Celeron 4305UE						

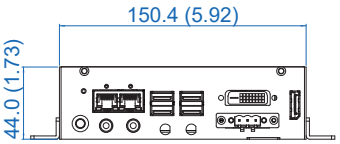
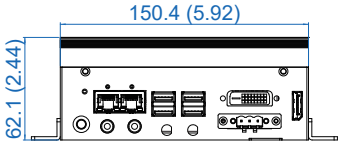
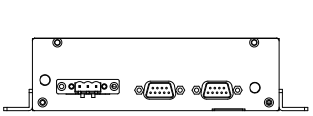
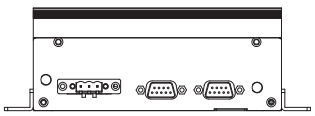
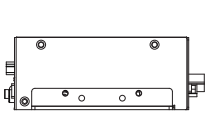
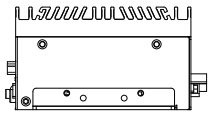
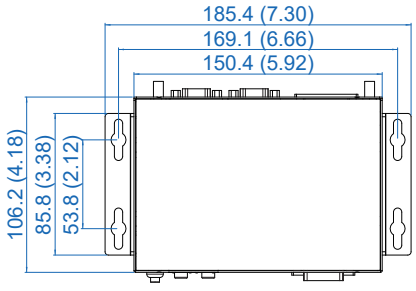
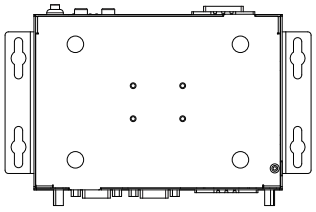
Accessories

DDR4 32G	Certified DDR4 32GB 2666MHz RAM
DDR4 16G	Certified DDR4 16GB 2666/2400/2133 MHz RAM
DDR4 8G	Certified DDR4 8GB 2666/2400/2133 MHz RAM
DDR4 4G	Certified DDR4 4GB 2666/2400/2133 MHz RAM
DIN-RAIL Kit	DIN Rail Kit
PWA-60WP3	60W, 24V/2.5A 90V AC to 264V AC Power Adapter with 3-Pin 3.5mm Terminal Block
PWA-60WP3-WT	60W, 24V/2.5A 90V AC to 264V AC Power Adapter with 3-Pin 3.5mm Terminal Block, Wide Temperature -30°C to +70°C
PWA-120W	120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
PWA-160W-WT	160W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth	WiFi & Bluetooth Module with Antenna

Dimensions & Drawing

Unit : mm (inch)

SPC-5000



SPC-5100