

RCX-1000 RTX2080



Workstation-grade Intel® Xeon®/Core™ i7/i5/i3 (Coffee Lake)
Expandable GPU Computing System with NVIDIA® GeForce RTX™ Graphics

- 6 cores 8th Generation Intel® Xeon®/Core™ i7/i5/i3 (Coffee Lake) with workstation-grade Intel® C246 Chipset
- 4 DDR4 2666MHz Memory, up to 128GB (ECC/Non-ECC)
- 6 external USB 3.1 Gen 2 support up to 10Gbps data transfer
- Powered by advanced NVIDIA Turing™ GPU architecture and all-new RTX platform, NVIDIA® GeForce RTX™ series graphic engine supports up to 6X the performance of previous generation graphics cards for real-time AI computing
- Display : 1 DVI, 1 HDMI and 5 DisplayPort, up to 8K Resolution
- 2 Independent GigE LAN, iAMT 12.0 supported
- 2 External SIM Socket for WiFi/4G/3G/LTE/GPRS/UMTS
- 4 Front-access 2.5" SSD Tray, RAID 0, 1, 5, 10 supported
- 32 Isolated DIO, 4 COM RS-232/422/485
- 2 PCI/PCIe Slot, 2 M.2 Socket : 1 M.2 Key M, 1 M.2 Key E
- Supports wide range power input with 80V Surge Protection
- Configurable Ignition Power Control



Deep Learning



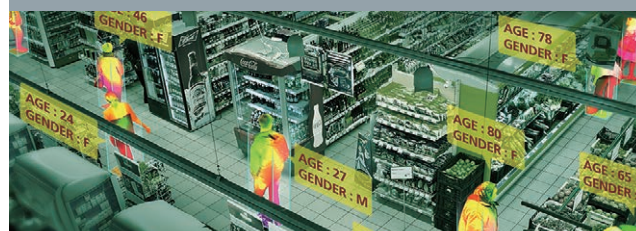
Autonomous Vehicles



Robotic Control



Public Surveillance



Specifications

System

Processor	6 cores Intel® Xeon®/Core™ i7/i5/i3 Processor (Coffee Lake-S)
Chipset	Intel® C246
BIOS	AMI
SIO	IT8786E
Memory	4 DDR4 2666MHz SO-DIMM, up to 128GB (ECC/Non-ECC)
OS	Windows 10, Linux

I/O Interface

Serial	4 COM RS-232/422/485 (ESD 8KV)
USB	- 6 USB 3.1 Gen 2 (External) - 1 USB 2.0 (Internal)
Isolated DIO	32 Isolated DIO : 16 DI, 16 DO
LED	Power, HDD, Wireless
SIM Card	2 External SIM Card Socket

Expansion

Mini PCIe	2 Full-size for PCIe/USB/External SIM Card/mSATA
M.2	1 M.2 Key E Socket
PCI/PCIe	Up to 2 PCI/PCIe Slot, by request

Graphics

Graphics Processor	- Intel® UHD Graphics P630/630 - NVIDIA® GeForce RTX™ 2080
Interface	7 independent displays : - 1 DVI : Up to 1920 x 1200 @60Hz - 3 DisplayPort : Up to 7680 x 3840 @60Hz - 1 DisplayPort : Up to 4096 x 2304 @60Hz - 1 Digital Display : Up to 4096 x 2304 @60Hz - 1 HDMI : Up to 4096 x 2160 @60Hz

Storage

SATA	4 SATA III (6Gbps) support S/W RAID 0, 1, 5, 10
mSATA	2 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	- 4 Front-access 2.5"SSD/HDD Tray - 1 M.2 Key M Socket

Audio

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

Ethernet

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

Power

Power Input	- 24V to 36V, DC-in - 12V DC-in (Optional)
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block
Surge Protection	Up to 80V/1ms Transient Power

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	330.0mm x 210.0mm x 172.0mm (12.99" x 8.27" x 6.77")
Weight	RCX-14XXFR RTX2080 : 6.8 kg (15 lb) RCX-14XXF RTX2080 : 6.4 kg (14.1 lb)
Mounting	Wallmount by mounting bracket

Environment

Operating Temp.	-25°C to 45°C (-13°F to 113°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 45°C
Shock/Vibration	- IEC 61373 : 2010 - Railway Applications : Rolling Stock Equipment, Shock and Vibration Tests
EMC	CE, FCC, EN50155, EN50121-3-2

* The rights of all brand names, product names and trademarks belong to their respective owners.
Copyright © 2019 Vecow Co., Ltd. All rights reserved.

Order Information

Model	Display					GigE LAN	SSD Tray	PCI	PCIe x4	PCIe x1	10G USB 3.1	SIM	Isolated DIO
	DVI	8K HDMI	8K DP	4K DP	Digital Display								
RCX-1430FR RTX2080							4	-	1	1			
RCX-1430F RTX2080							-	-	1	1			
RCX-1421FR RTX2080	1	1	3	1	1	2	4	1	1	-	6	2	32
RCX-1421F RTX2080							-	1	1	-			
RCX-1412FR RTX2080							4	2	-	-			
RCX-1412F RTX2080							-	2	-	-			

* RTX 2080 Ti and RTX 2070 are available by request.

CPU List

Series	CPU	Cache (MB)	Turbo Freq. (GHz)	TDP (W)	ECC Memory
Intel® Xeon®	E-2176G	12	4.6	80	Yes
	E-2124G	8	4.5	71	
Intel® Core™	i7-8700	12	4.6	65	NA
	i7-8700T	12	4.0	35	
	i5-8500	9	4.1	65	NA
	i5-8500T	9	3.5	35	
	i3-8100	6	3.6	65	Yes
i3-8100T	6	3.1	35		

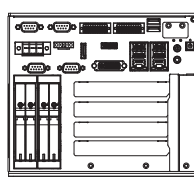
Accessories

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
PWS-480W-WT	480W, 24V, 90V AC to 305V AC Power Supply, Wide-Temp, IP65
PWS-600W	600W, 24V, 90V AC to 305V AC Power Supply
PWS-600W-WT	600W, 28.8V, 90V to 305V AC Power Supply, Wide Temperature -40°C to +70°C
FAN Sink	Fan Sink for RCX-1000 Series
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

Dimensions & Drawing

Unit : mm (inch)

RCX-14XXFR RTX



RCX-14XXF RTX

