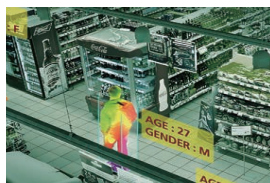


ECX-1200 GTX1050

Workstation-grade Intel® Xeon®/Core™ i7/i5/i3 (CFL-R)
AI Computing System with NVIDIA® GeForce GTX 1050



- 8 Cores 9th Generation Intel® Xeon®/Core™ i7/i5/i3 (Coffee Lake Refresh) with workstation-grade Intel® C246 Chipset
- 2 DDR4 2666MHz Memory, up to 64GB (ECC/Non-ECC)
- NVIDIA® GeForce® GTX 10 Series graphics engine supports
- NVIDIA Pascal™ GPU architecture, up to 8K resolution
Display : 1 VGA, 1 HDMI, 2 DVI & 3 DisplayPort interfaces support up to 6 independent HD displays
- Multiple external USB 3.1 Gen 2 support up to 10Gbps data transfer
- Multiple external USB 3.1 Gen 2 support up to 10Gbps data transfer
- 6 Independent GigE LAN with 4 IEEE 802.3at PoE+
- 32 Isolated DIO, 6 USB 3.1, 4 COM RS-232/422/485
- Storage : 2 2.5" SSD Tray, 1 CFast, 2 M.2, 2 SATA III
- Expansion : 2 Mini PCIe/mSATA, 1 M.2
- 3 External SIM Socket for WiFi/4G/3G/LTE/GPRS/UMTS
- 12V to 36V DC Power Input with 80V Surge Protection
- Configurable Ignition Power Control



Computer Vision



Autonomous Machines



Facial Recognition



Robotic Control



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Specifications

System

Processor	8 Cores Intel® Xeon® /Core™ i7/i5/i3 Processor (CFL-RS)
Chipset	Intel® C246
BIOS	AMI
SIO	PI8786E
Memory	2 DDR4 2666MHz SO-DIMM up to 64GB (ECC/Non-ECC)
OS	Windows 10, Linux

I/O Interface

Serial	4 COMRS-232/422/485 (ESD 8KV)
USB	- 6 USB 3.1 (External) - 1 USB 2.0 (Internal)
Isolated DIO	ECX-1200 Series : 32 Isolated DIO: 16 DI, 16 DO ECX-1100 Series : 16 GPIO
LED	Power, HDD, PoE, Wireless
SIM Card	3 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

Graphics

Graphics Processor	- Intel® UHD Graphics 630 - NVIDIA® GeForce® GTX1050 Ti/GTX1050
Interface	- 1 VGA: Up to 1920 x 1200 @60Hz - 1 HDMI: Up to 4096 x 2304 @60Hz - 2 DVI: Up to 1920 x 1200 @60Hz - 1 DisplayPort: Up to 7680 x 3840 @60Hz - 2 DisplayPort: Up to 4096 x 2304 @60Hz

Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
mSATA	2 SATA III (Mini PCIe Type, 6Gbps)
M.2	- 1 M.2 Key M Socket - 1 M.2 Key B Socket
Storage Device	- 1 CFast Socket, Push-in/Push-out Ejector - 2 Front-access 2.5" SSD/HDD/Tray

Audio

Audio Codec	Realtek AIC892, 5.1 Channel HDAudio
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN1	Intel® I219LM GigE LAN supports iAMT 12.0
LAN2	Intel® I210 GigE LAN

PoE (ECX-1200)

LAN3 to LAN6	GigE IEEE 802.3at (25.5W/48V) PoE * by Intel® I350
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Power

Power Input	12V to 36V, DC-in
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 TPM2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Mgmt.	Wake on LAN PXE supported
HWMonitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

Mechanical

Dimensions	260mm x 215mm x 79mm (10.2" x 8.5" x 3.1")
Weight	4.8 kg (10.58 lb)
Mounting	- Wallmount by mounting bracket - DIN Rail Mount (Optional) - 2U Rackmount (Optional)

Environment

Operating Temp.	35W TDP CPU : -20°C to 60°C (-4°F to 140°F) 65W TDP CPU : -20°C to 55°C (-4°F to 131°F) 80W TDP CPU : -20°C to 45°C (-4°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% @ 60°C
Shock/Vibration	- IEC61373 : 2010 - Railway Applications : Rolling Stock Equipment, Shock and Vibration Tests
EMC	CE, FCC, EN50155, EN50121-3-2

Order Information

Model Name	NVIDIA® GeForce™	GigE LAN	PoE+	SSD Tray	USB 3.1	COM	SIM	Isolated DIO	GPD
ECX-1200-GTX1050T	GTX1050 Ti	6	4					32	-
ECX-1200-GTX1050	GTX1050	6	4					32	-
ECX-1100-GTX1050T	GTX1050 Ti	2	-	2	6	4	3	-	16
ECX-1100-GTX1050	GTX1050	2	-					-	16

CPU List

Series	CPU	Cores	GHz	TDP (W)	CPU	Cores	GHz	TDP (W)	ECCRAM
Intel® Xeon®	E-2176G	6	4.6	80	E-2278GE	8	4.7	80	Yes
	E-2124G	4	4.5	71	E-2278GEL	8	3.9	35	
					E-2226GE	6	4.6	80	
Intel® Core™	i7-8700	6	4.6	65	i7-9700E	8	4.4	65	N/A
	i7-8700T	6	4	35	i7-9700TE	8	3.8	35	
	i5-8500	6	4.1	65	i5-9500E	6	4.2	65	
	i5-8500T	6	3.5	35	i5-9500TE	6	3.6	35	
	i3-8100	4	3.6	65	i3-9100E	4	3.7	65	
	i3-8100T	4	3.1	35	i3-9100TE	4	3.2	35	

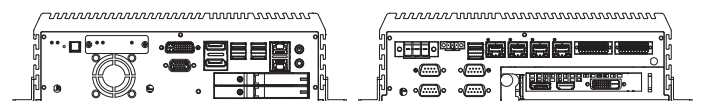
Accessories

DDR4 32G	Certified DDR4 32GB 2666MHz RAM
DDR4 16G	Certified DDR4 16GB 2666/2400/2133MHz RAM
DDR4 8G	Certified DDR4 8GB 2666/2400/2133MHz RAM
DDR4 4G	Certified DDR4 4GB 2666/2400/2133MHz RAM
PWA-160WB-WT	160W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C
PWA-280WB-WT	280W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C
VESA Mount	VESA Mounting Kit
DIN-RAIL Kit	DIN Rail and VESA Mounting Kit
Rack Mount	2U Rackmount Kit
TMK220P-100	Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK220P-500	Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB/IMB K20P	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

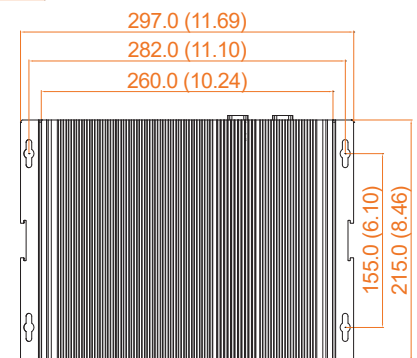
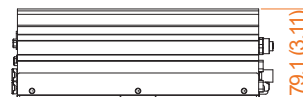
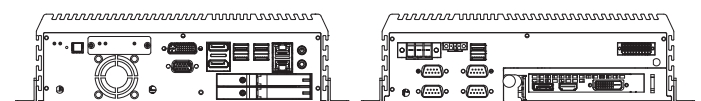
Dimensions & Drawing

Unit : mm (inch)

ECX-1200 GTX1050



ECX-1100 GTX1050



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