

ECU-4784

Intel 6th Gen IEC-61850-3 Certified Power Automation Computers



Features

- 6th Intel® Xeon®, Core™ i7, i5, i3, Celeron® Processors
- Isolated 8 x LAN, 10 x Serial Port Communication Interfaces
- 100-240V_{AC}/DC Redundant Power Supply (configurable option)
- 48V_{DC} PSU option (Configuration option)
- 2 x IO Expansion Slots
- 2 / 3 x 2.5" SATA SSD, 1 x M.2 (M Key) / CFsat, Support RAID 0,1
- DVI-D & DVI-I or VGA Display Interface
- Programmable LEDs for customized application
- Supports SNMP for remote management
- Trusted Platform Module (TPM)



Specifications

Model		ECU-4784-C3	ECU-4784-E2	ECU-4784-E3	ECU-4784-E4	ECU-4784-E5
Computer system	CPU	Intel® Celeron® 3955U	Intel® Core™ i3-6100U	Intel® Core™ i5-6300U	Intel® Core™ i7-6600U	Intel® Xeon® E3-1505L v5
	Processor Base Frequency	2.00 GHz	2.30 GHz	2.40 GHz	2.60 GHz	2.00 GHz
	Intel® Smart Cache	2 MB	3 MB	3 MB	4 MB	8 MB
	Core Number	2	2	2	2	4
	TDP	15W	15W	15W	15W	25W
Memory	Technology	Dual-channel DDR3L	Dual-channel DDR3L	Dual-channel DDR3L	Dual-channel DDR3L	Dual-channel DDR4
	Capacity	16 GB	8 GB	16 GB	8 GB / 16 GB	16 GB / 32 GB
	DIMM Slot	2 x SO-DIMM				
Ethernet	Controller	1 x Intel® I219 + 7 x Intel® I210				
	Speed	10/100/1000Base-T, Supports teaming function, PXE, LAN1 supports AMT				
	Connector	8 x RJ-45				
Storage	2.5" SSD	3 x SATA				2 x SATA
	M.2 / CFast SSD	1 x M.2 PCIe NVMe 2242/2280 (M Key)				1 x CFast
I/O	External USB	3 x USB 2.0 (rear), 2 x USB 3.0 (front)				
	Internal USB	1 x USB 2.0				
	Serial	2 x Isolated RS-232 (DB9 connectors, Standard), 8 x RS-232/422/485 (Terminal Block) RS-232: 50 ~ 115.2 kbps, RS-422/485: 50 ~ 921.6 kbps 2500V isolation				
	Display	1 x DVI-D, 1 x DVI-I				1 x DVI-D, 1 x VGA
Expansion Interface	Proprietary PCI/PCIE	2				
	Optional Module	RJ45 Port, SFP Port, Isolated Serial Port, Isolated Digital I/O, HSR/PRP, PCIe, Mini-PCIe, PCI-104, IRIG-B				
Software	Operating System	Windows10, Windows Server 2016, WES7(W57P), Linux (Ubuntu 22.04)				
Power	Input Voltage	Redundant Power Supply Power1: 100 ~ 240 V _{AC} , 100 ~ 240 V _{DC} (Inside) / 48 V _{DC} (Option) Power2: 100 ~ 240 V _{AC} , 100 ~ 240 V _{DC} / 48 V _{DC} (Option)				
Environment	Operating Temperature	-25 ~ 70° C (-13 ~ 158° F) with 100% CPU & I/O loading				-25 ~ 60° C (-13 ~ 140° F) with 50% CPU I/O loading
	Relative Humidity	5 ~ 95% RH (non-condensing)				
Mechanical	Dimensions (W x H x D)	With handles: 482.6 x 88 x 323.9 mm (19" x 3.5" x 12.8") Without handles: 440 x 88 x 280 mm (17.3" x 3.5" x 11")				
	Mounting	2U Rackmount				
	Weight	6.0 kg (13.22lbs)				
	Ingress Protection	IP20				
Certification	EMC	CE, FCC, IEEE 1613, CCC				
	Safety	CB, UL, CCC				
	Type approval	IEC 61850-3, China Electricity Certificate IV level				
	Shock Protection	IEC 60068-2-27: 30 G half sine, 11 ms with SSD				
Other	Vibration Protection	IEC 68-2-64 (Random 1 Oct./min, 1hr/axis.): 2Grms @ 5 ~ 500Hz with SSD				
	Trusted Platform Module	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0	TPM 1.2
Other	Watchdog Timer	Programmable 256 levels time interval, from 1 to 255 seconds for each tier				
	Relay	Relay Output Form C Contact 5A @ 125V _{AC} / 5A @ 30V _{DC} Channel 1				

Ordering Information

Part Number	Processor	Memory	2.5" SSD Slots	M.2 / CFast SSD	PSU	COO
ECU-4784-C36SCE	3955U	16GB	3	1 x M.2 NVMe	1	China
ECU-4784-E25SCE	i3-6100U	8GB	3	1 x M.2 NVMe	1	China
ECU-4784-E36SCE	i5-6300U	16GB	3	1 x M.2 NVMe	1	China
ECU-4784-E36SCU	i5-6300U	16GB	3	1 x M.2 NVMe	1	Taiwan
ECU-4784-E45SCE	i7-6600U	8GB	3	1 x M.2 NVMe	1	China
ECU-4784-E45SCU	i7-6600U	8GB	3	1 x M.2 NVMe	1	Taiwan
ECU-4784-E46SCE	i7-6600U	16GB	3	1 x M.2 NVMe	1	China
ECU-4784-E46SCU	i7-6600U	16GB	3	1 x M.2 NVMe	1	Taiwan
ECU-4784-E56DAE	E3-1505L v5	16GB	2	1 x CFast	2	China
ECU-4784-E56SAE	E3-1505L v5	16GB	2	1 x CFast	1	China
ECU-4784-E57SAE	E3-1505L v5	32GB	2	1 x CFast	1	China

Optional List

Part Number	Description
XECU-FSP150-1H35	PSU 100 ~ 240V AC/DC, W/PFC
9893SW0400E	PSU 48V DC
UNOP-1000I-BE	PCI & Mini-PCI Expansion Card
UNOP-1000J-BE	PCI-104 & Mini-PCIe Expansion Card
UNOP-1000K-AE	PCIe Expansion Card
ECU-P1528PE-B	8-Port SFP Gigabit Base Ethernet Card
ECU-P1528RE-B	8-Port RJ45 Gigabit Base Ethernet Card
ECU-P1618D-B	8 x RS-232/422/485 PCIe w/ ECUP slot
ECU-P1628D-B	8 x Isolated RS-232/422/485 PCIe w/ ECUP slot
ECU-P1624D-B	4 x Isolated RS-232/422/485 & IRIG-B w/ECUP slot
ECU-P1761A-AE	4-ch DI & 4-ch DO & IRIG-B board w/ ECUP slot
ECU-P1524PE-AE	2 x SFP 100Mbps HSR/PRP Card w/ ECUP slot
ECU-P1524PE-GAE	2 x SFP Gigabit HSR/PRP Card w/ ECUP slot

*Note: 2nd power configuration is available upon request via Advantech CTOS

OS List

Part Number	Description
20706WX9HS0164	Windows 10 IoT Enterprise 2019 LTSC 64bit for Intel® Xeon® or Core™ i7 processors
20706WX9VS0168	Windows 10 IoT Enterprise 2019 LTSC 64bit for Intel® Celeron® or Core™ i5/i3 processors