

ITA-5831

Intel® 6th Generation Core™ i Processor Fanless System EN 50155 Certified Product for Railway Applications

Preliminary



Features

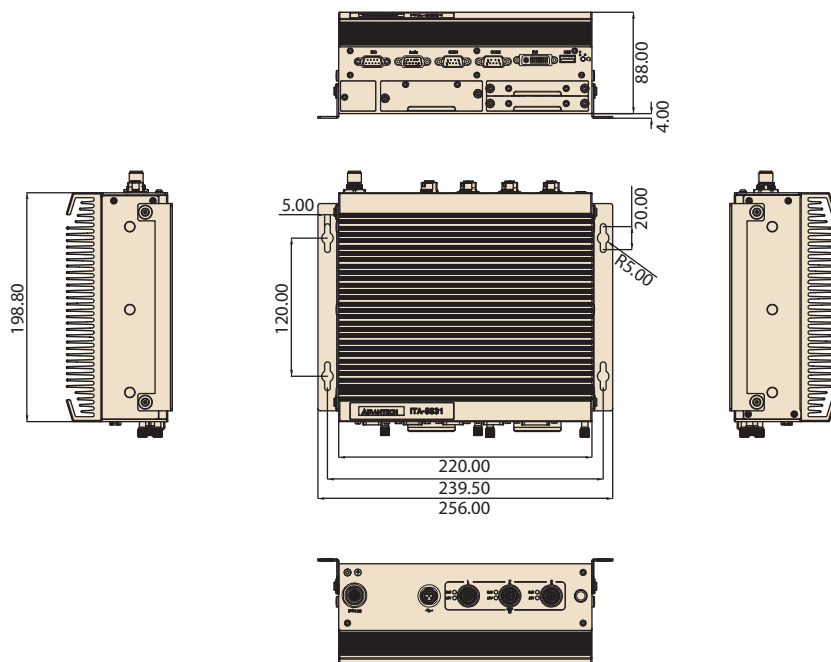
- Intel skylake-H platform with QM170
- Fanless computer for railway vehicle applications, fully compliant with EN 50155
- Satisfy temp. standard: EN 50155 Tx (-40 ~ 70° C) and IEC 61373 body mount class B
- Compliant with EN 50121-3-2 EMC test standard
- Ruggedized connectors (M12) used for communication and power ports
- Support Easy-swap storage module and I/O module

Specifications

System Chipset	CPU	Intel® Core™ i7-6822EQ	
	Max Speed	2.0GHz, Turbo boost max to 2.8GHz	
	L3 Cache	8M	
	Chipset	QM170	
Memory	BIOS	AMI SPI 64 Mb	
	Technology	DDR4 2133MHz	
	SODIMM slot	1	
Display	Max. Capacity	8G on board memory, up to 16G	
	Chipset	Intel Integrated Graphics	
	DVI-I	Maximum resolution up to 2048 x 1536	
I/O	DP(Internal)	pin-header on board	
	USB	2 x USB3.0 with Type A	
	Serial Port	1 x USB2.0 with M12 A-coded(F) 4-pin	
	DIO	2 x DB9, RS-232/422/485, Support auto-flow control	
	DVI-I	1 x DB9, 8-bit with Isolation	
Ethernet	DVI-I	1 x DVI-I	
	Audio	1 x DB9, 1 x Speaker-out with 2 x 4W Amp., 1 x Mic-in	
	Controller	Intel i210-IT	
Storage	Interface	10/100/1000 Mbps	
	Connector	Up to 3 x M12 x-coded(F)	
	HDD/SSD easy-swap module	Max to 3 x 2.5" SSD or 2 x 2.5" HDD	
Others	mSATA	1 x mSATA slot on board	
	Mini PCIe	3 x Mini PCIe Socket (Full size)	
LED & Button	SIM card	2 x SIM slot	
	LED	1 x Power, 1 x Storage, 1 x Alert	
Power	Button	1 x Power on/off Switch	
	Input Voltage	DC 24V input compliant with EN50155 class S2/C1(Optional DC 48/72/110V input)	
Watchdog Timer	Connector	1 x M12 S-coded(M) 4-pin	
	Output	System reset	
Environment	Interval	Programmable 1~255 sec/min	
	Temperature	Operating (with Industrial SSD/CF)	Non-Operating
Mechanical	Humidity	-40 ~ 70° C	
	Dimension (W x H x D)	5% ~ 95% @ 40° C (Non-Condensing)	
Certification	Install	220 x 200 x 88 mm	
	EMC	275 x 200 x 88 mm with mounting kits	
EN 50155 Compliance	Safety	Rack-mounting	
	Ambient Temperature	CE/FCC Class A, CCC	
	Shock and Vibration	UL, CB, CCC	
	Interruptions of Voltage Supply	EN 50155 Tx (-40 ~ 70° C)	
EN 50155 Compliance	Supply Change Over	IEC 61373 body mount class B	
	EMC	Class S2	
		Class C1	
		EN 50121-3-2	

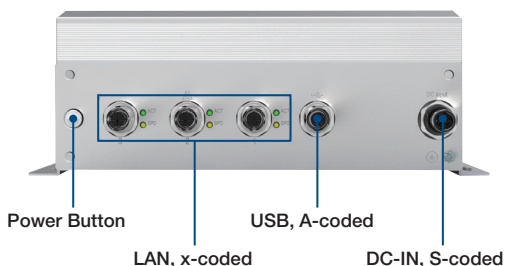
Dimensions

Unit: mm

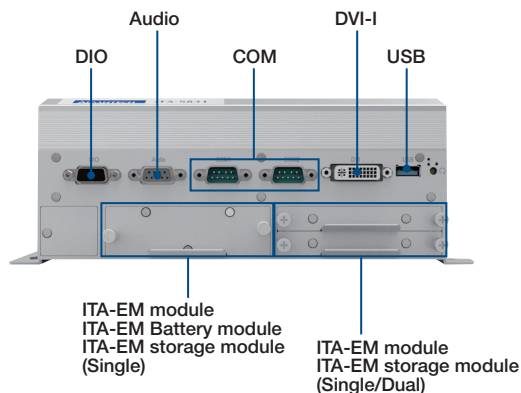


I/O View

Front



Rear



Ordering Information

Part number	CPU On board	Memory	Ethernet (M12/x-code/ 8-pin/Female)	USB (M12/A-code/ 4-pin/Female)	USB (Type A)	mini-PCIe	Storage	mSATA	COM (DB9)	Power input (M12/S-code /4-pin/male)
ITA-5831-L7A1E	i7-6822EQ	8G on board	3	1	2	3	up to 2 x 2.5" SSD	1	up to 10	24 V _{DC}

Optional List

Part number	Description
ITA-EM-SR61	Easy-swap module, 4 x RS232/422/485 with Isolation
ITA-EM-CN61	Easy-swap module, 2 x CAN ports
ITA-EM-PE61	Easy-swap module, 2 PoE: up to 15.4W @ 48V _{DC}
ITA-EM-BA61	ITA-EM Battery module, Panasonic 4S1P 2900mAh
ITA-EM-ST61	ITA-EM Storage module, single 2.5" SSD