



DCO-1000-ASL

DIN-Rail Fanless Embedded Computer with Intel® Atom® x7433RE/x7835RE CPU, 2x DP, 2x COM, 4x USB, 4x LAN



Features

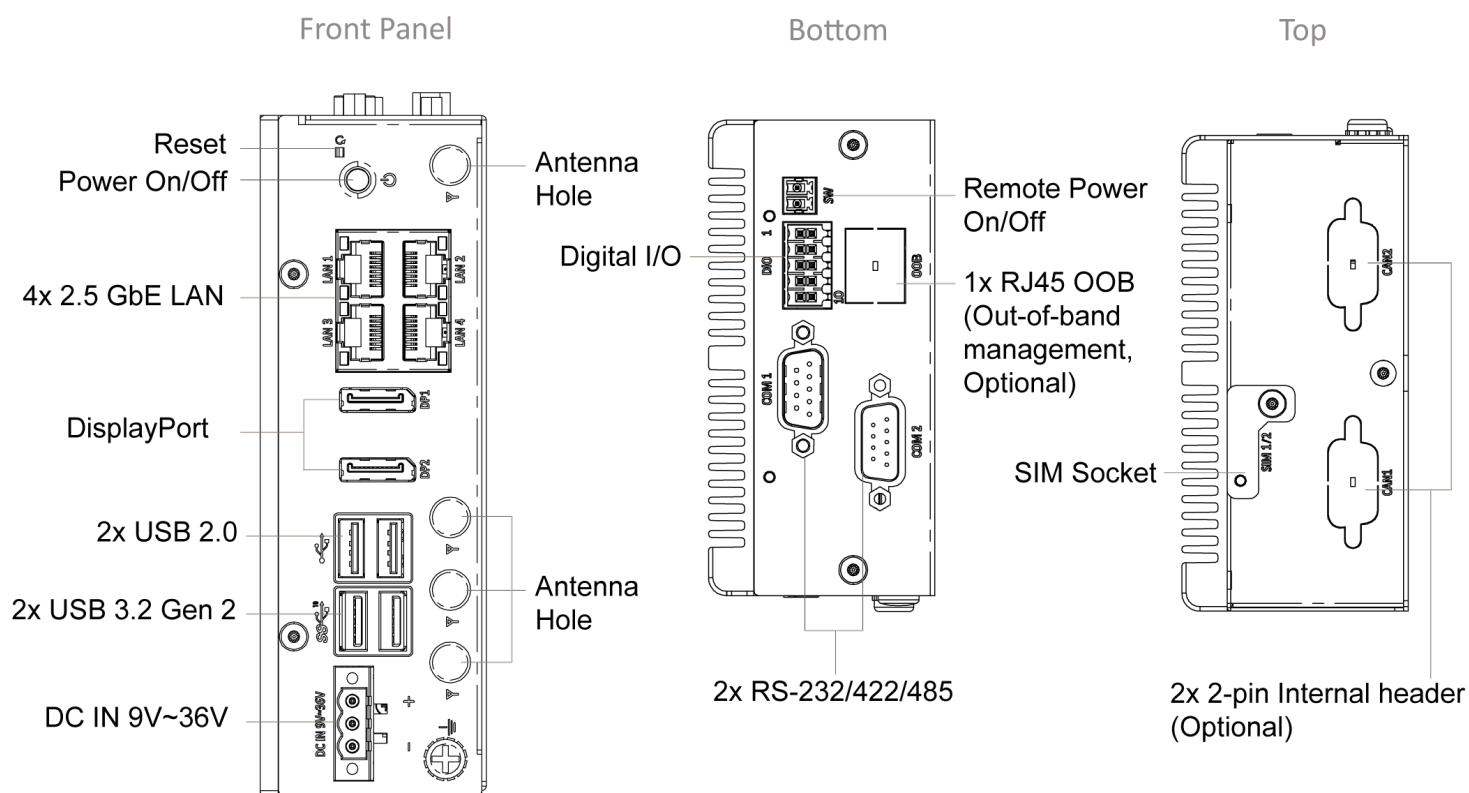
- Support Intel® Atom® x7433RE/x7835RE Processor
- 1x 262-Pin DDR5 4800 MT/s SODIMM. Max. up to 16GB
- Dual Independent Display by 2x Display Port
- 4x 2.5GbE LAN
- 1x M.2 (B Key, 2242, PCIe x2, support NVMe)
- 1x M.2 (B Key, 3042/3052, USB 3.2 Gen2 & USB2.0, support 4G/5G Module)
- 2x RS-232/422/485, 2x USB 3.2 Gen2, 2x USB 2.0
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -40°C to 55°C
- TPM 2.0 Supported
- UL 61010-1, UL 61010-2-201, CE, FCC Class A, UKCA, ICES-003

Specifications

System		Relative Humidity	10% to 95% (non-condensing)
Processor		Certification	UL 61010-1, UL 61010-2-201 CE, FCC Class A, UKCA, ICES-003
Support Intel® Atom® Processor (Up to 12W TDP)		Vibration	DIN-Rail Wall Mount with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis DIN-Rail Mount with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis
-Intel® Atom® Processor x7433RE, Quad Core, CPU FHM 1.5 GHz/1C Turbo 3.2GHz, GPU 32EU, TDP 9W		Shock	With SSD: 20G, half sine, 11ms
-Intel® Atom® Processor x7835RE, Eight Core, CPU FHM 1.0 GHz/1C Turbo 3.6GHz, GPU 32EU, TDP 12W		Physical	
System Chipset	SoC integrated	Dimensions (W x D x H)	150 x 105 x 50 mm
LAN Chipset	2.5 GbE1: Intel I226 2.5 GbE2: Intel I226 2.5 GbE3: Intel I226 2.5 GbE4: Intel I226 (Support TSN) (LAN #1-2 Shared PCIe Gen 2 x1 Lane bandwidth)	Weights	0.85 kg
System Memory	1x 262-Pin DDR5 4800 MT/s SO-DIMM. Max. up to 16GB (In-Band ECC Supported)	Construction	Extruded Aluminum with Heavy Duty Metal
Graphics	Intel® UHD Graphics	Mounting Options	DIN-Rail Mounting Wall Mounting
BIOS	AMI SPI BIOS		
Watchdog	Software Programmable Supports 1~255 sec. System Reset		
TPM	TPM 2.0		
Display			
Display Port	2x DisplayPort 1.4, DP (4096 x 2160@60Hz)		
Multiple Display	Dual Display		
Storage			
M.2	1x M.2 (B Key, 2242, PCIe x2, support NVMe), Default 128G SSD		
SIM Socket	1x Dual Nano SIM Socket		
Expansion			
M.2	1x M.2 (B Key, 3042/3052, USB 3.2 Gen2 & USB2.0, support 4G/5G Module) 1x M.2 (E Key, 2230, PCIe x1 & USB2.0, support Wifi/Bluetooth)		
I/O			
CAN	2x 2-pin Internal header (Optional)		
COM	2x RS-232/422/485		
DIO	4 in / 4 out (Isolated)		
LAN	4x RJ45		
OOB	1x RJ45 (Optional)		
USB	2x USB 3.2 Gen 2 (10 Gbps) 2x USB 2.0		
Others	4x WiFi Antenna Holes 1x Power Switch, 1x Reset Switch 1x AT/ATX Internal Switch Jumper 1x 2-PIN Remote Power On/Off 1x Internal CMOS Battery Cable		
Operating System			
Windows	Windows 10/Windows 11		
Linux	Linux kernel 6.2		
Power			
Power Adapter	Optional AC/DC 12V/5A, 60W		
Power Mode	AT, ATX		
Power Supply Voltage	9~36VDC		
Power Connector	3-pin Terminal Block		
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection		
Environment			
Operating Temperature	-40°C to 55°C		
Storage Temperature	-40°C to 85°C		

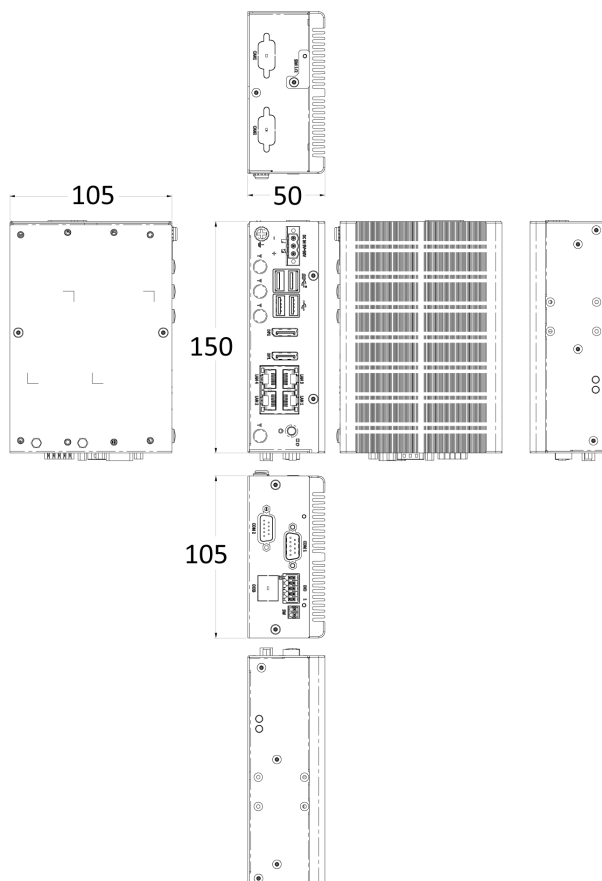
- For configured to run at 12W, operating temperatures will be limited to 55°C.
- 12W CPUs may experience thermal throttling depending on extreme application workloads; this is also due to an increase in the physical CPU cores from the Intel silicon (up to 8 cores). Please note, this does not indicate system malfunction or problems in the fanless design. Please consult our embedded engineers for the best configuration to match your application requirements.
- All specifications and photos are subject to change without notice.

External I/O Mechanical Layout



Dimension

Unit: mm



Compliances and Standards

Shock	With SSD: 20G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Vibration	DIN-Rail Wall Mount with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis DIN-Rail Mount with NVMe SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 Procedure I
Operating Temperature	-40°C to 55°C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMC	• FCC Class A (47 CFR part 15.109 and part 15.107) • CE • ICES-003 • UKCA • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	cULus • UL 61010-1, 3rd Ed. • UL 61010-2-201, 2nd Ed. • CAN/CSA-C22.2 No. 61010-1-12, 3rd Ed. • CSA C22.2 No. 61010-2-201:18, 2nd Ed.
Environmental Compliance	• RoHS 3 (2015/863/EU) • REACH

Available Models

Model No.	Description
DCO-1000-ASL-X7433RE-P	DIN-Rail Fanless Embedded Computer with Intel® Atom® x7433RE CPU, 2x DP, 2x COM, 4x USB, 4x LAN
DCO-1000-ASL-X7835RE-P	DIN-Rail Fanless Embedded Computer with Intel® Atom® x7835RE CPU, 2x DP, 2x COM, 4x USB, 4x LAN

Optional Accessories

Model No.	Description
1-E09A06008	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
1-TPCD00005	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List

1x DCO-1000-ASL Series Embedded System
1x DIN-Rail Mount Kit
1x Wall Mounting Kit