EC700-ADN/ EC710-ADN

Intel® Processor N-series/Atom® Processor X Series
Fanless Embedded System

KEY FEATURES

On Board OOB built-in
Hardware status remote control&monitor, BIOS remote setup/update, OS remote recovery, Open-SSH/ UEFI Shell/In-Band Windows support

Slim and Fanless
Slim and fanless design for limited-space condition

Intel TCC within the system
Supported by X series CPU and TSN standard up to 2.5GbE (Opt.)

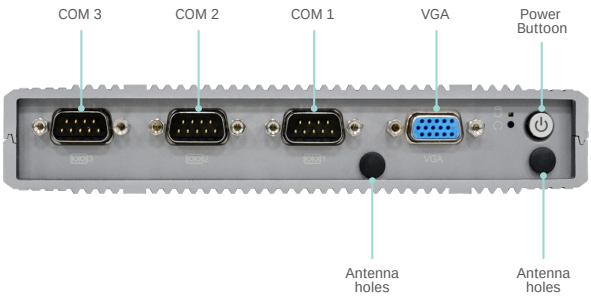
On Board DDR5 & eMMC Support
LPDDR5 4800 MHz memory down
eMMC module –Easy maintenance

Up to Quad Display Support
Support via HDMI/USB-C/VGA,
Quad display support by Dev

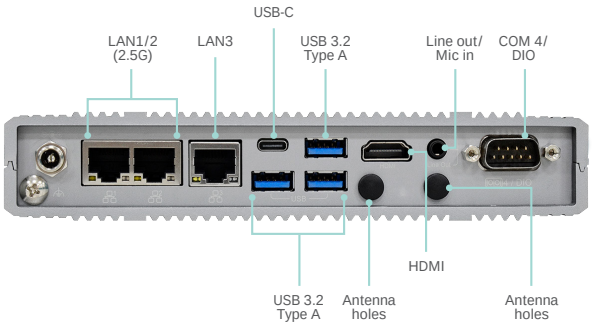
FC CE RoHS UK CA intel IoT Solutions Alliance

PANEL: EC700-ADN

System Height = 33mm



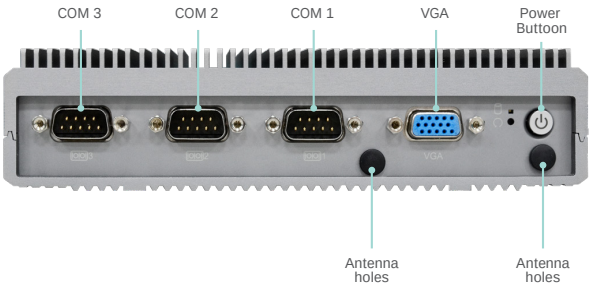
Front View



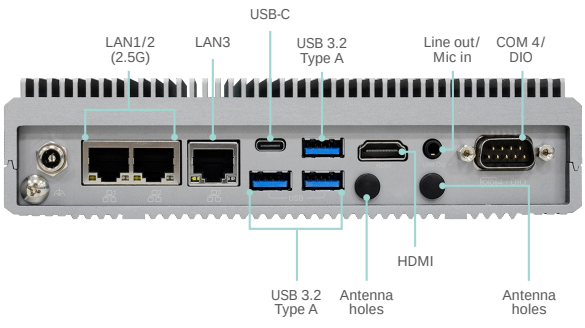
Rear View

PANEL: EC710-ADN

System Height = 43mm



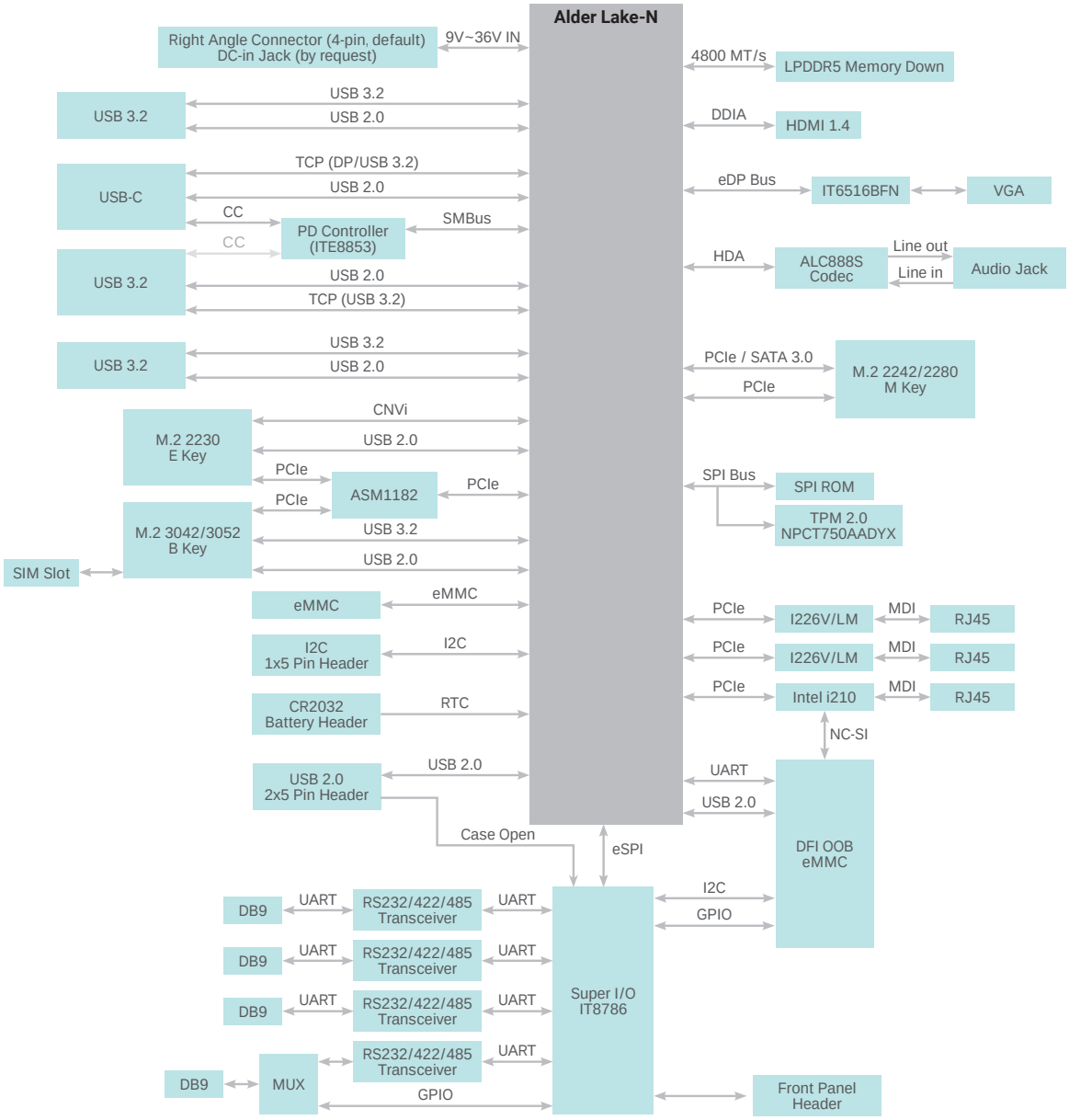
Front View



Rear View

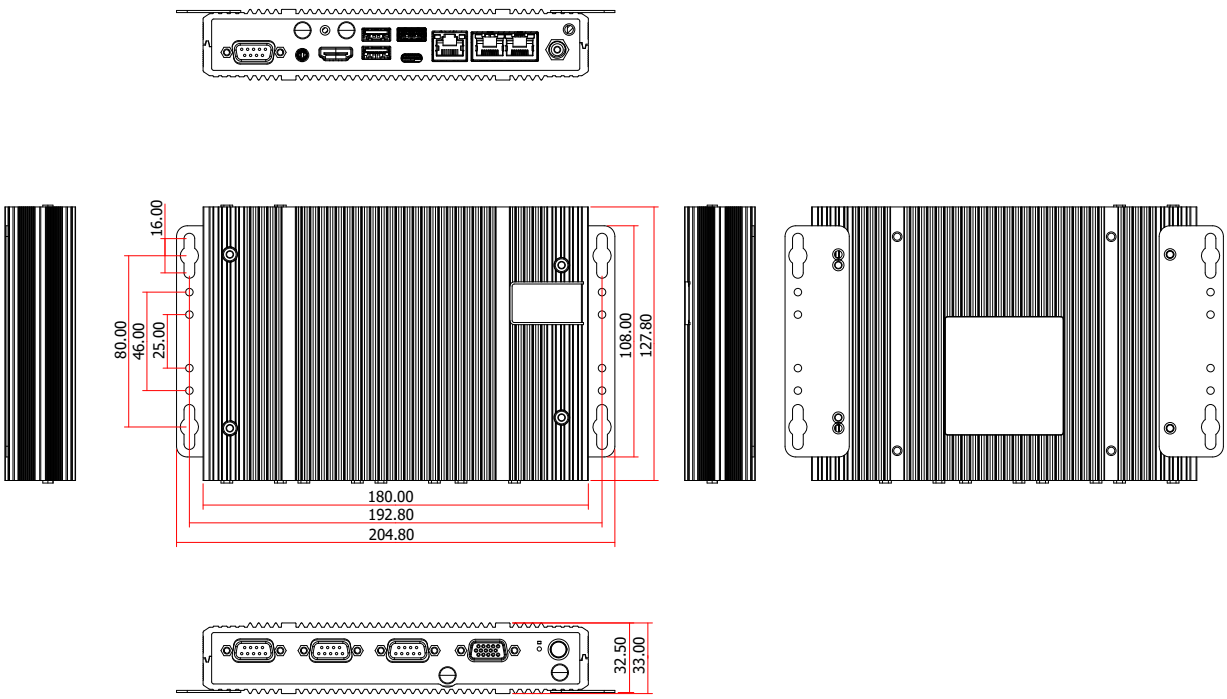
DFI Desire For Innovation

BLOCK DIAGRAM



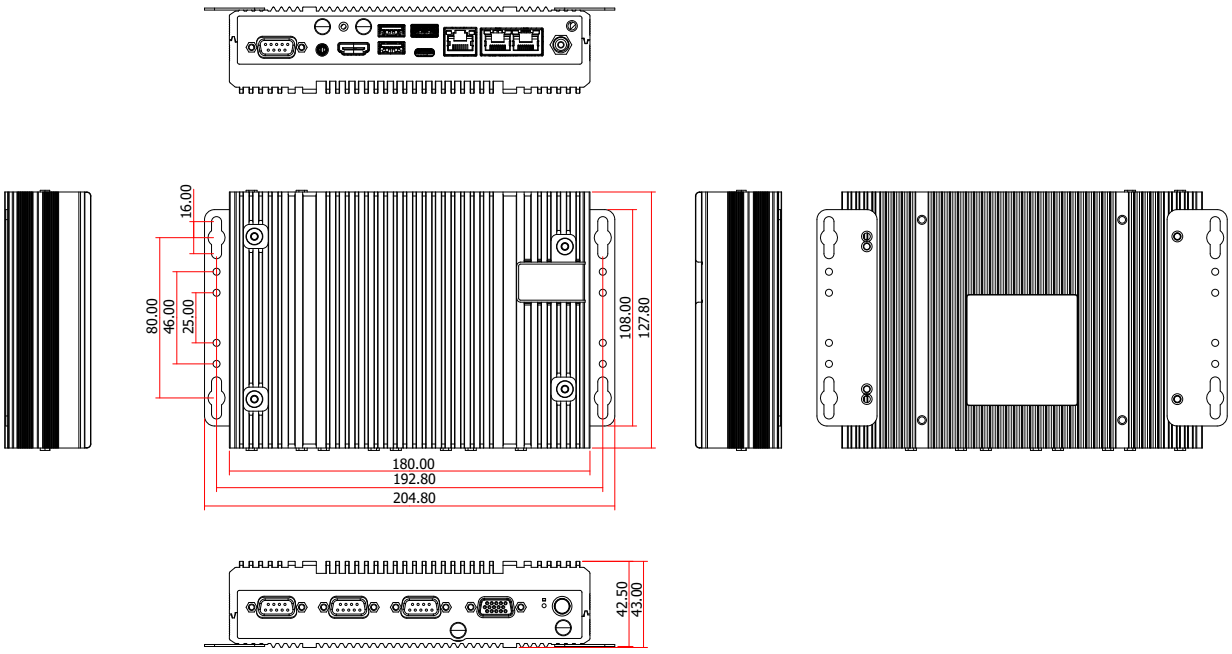
DIMENSIONS: EC700-ADN

System Height = 33mm



DIMENSIONS: EC710-ADN

System Height = 43mm



SPECIFICATION

SYSTEM	**Processor**	Intel Alder Lake-N Series Intel PC Client Series Intel® Processor N50 2 Cores, 1.0GHz to 3.4 GHz Intel® Processor N97 4 Cores, 2.0GHz to 2.9 GHz Intel® Processor N200 4 Cores, 1.0GHz to 3.2 GHz Intel® Core™ i3-N305 8 Cores, 1.0GHz to 3.0 GHz Intel® Embedded Series Intel® Atom® X7211E 2 Cores, 1.0GHz to 2.9 GHz Intel® Atom® X7213E 2 Cores, 1.7GHz to 2.9 GHz Intel® Atom® X7425E 4 Cores, 1.5GHz to 2.7 GHz
	Memory	8GB/16GB LPDDR5 4800 Memory down
	BIOS	AMI SPI 256Mbit (supports UEFI boot only)
GRAPHICS	**Controller**	Intel® UHD Graphics
	Feature	Execution Units: Up to 32 EUs 3D API: Open GL 4.6, DirectX12, Vulkan 1.2 (Windows) Mesa 3D, OpenGL 4.6, Vulkan 1.2 (Linux) Precision: FP32, FP16, INT8 Compute: OpenCL 3.0
	Display	1 x VGA 1 x HDMI 1.4 1 x USB-C (DP1.2 Alt. Mode)
STORAGE	**Internal**	1 x M.2 2280 M key (PCIex2/SATA)
	eMMC	eMMC module 32GB/64GB (Opt.)
EXPANSION	**Interface**	1 x M.2 2230 E key (USB 2.0/PCIe, support CNVi) 1 x M.2 3042/3052 B key (USB 3.0/USB 2.0/PCIe) with SIM 1 x M.2 2242/2280 M key (PCIex2/SATA)
AUDIO	**Audio Codec**	REALTEK ALC888S
ETHERNET	**Controller**	2 x Intel Ethernet controller i226 2.5GbE (support TSN by Intel Embedded sku.) 1 x Intel Ethernet controller i210 GbE (support DFI OOB function)
LED	**Indicators**	1 x Power LED 1 x Storage LED
FRONT I/O	**Serial**	3 x RS232/422/485 DB9 connector
	Antenna Hole	2 x antenna holes
	Display	1 x VGA
	Button	1 x Power Button 1 x Reset Button
REAR I/O	**Ethernet**	2 x 2.5GbE RJ45 1 x GbE RJ45 (support DFI OOB)
	Serial	1 x RS232/422/485/DIO DB9 connector
	USB	3 x USB 3.2 type A 1 x USB-C 3.2
	Display	1 x HDMI
	Audio	1 x 3.5mm Line out/Mic In
	Antenna Hole	2 x antenna holes
	Storage	1 x MicroSD (Opt.)
WATCHDOG TIMER	**Output & Interval**	System reset, programmable via software from 1 to 255 seconds
SECURITY	**TPM**	TPM 2.0 (Opt.)
POWER	**Type**	Wide range 9~36VDC
	RTC Battery	RTC battery CR2032
	Connector	2.5mm DC Jack
OS SUPPORT	**Microsoft**	Windows® 11 IoT Enterprise
	Linux	Ubuntu 22.04
ENVIRONMENT	**Operating Temperature**	0 to 60°C
	Storage Temperature	-40 to 85°C
	Relative Humidity	10 to 90% RH (non-condensing)
MECHANICAL	**Construction**	Aluminum + Metal
	Mounting	Wall mount, DIN-Rail, VESA Mount
	Dimensions (W x H x D)	180 x 33/43 x 127.8 mm
	Weight	TBD
STANDARDS AND CERTIFICATIONS	**Shock (During Operation)**	30G, IEC-60068-2-27 MIL-STD-810G
	Vibration (During Operation)	3 Grms, IEC 60068-2-64 MIL-STD-810G
	Certifications	CE, FCC, RoHS, UKCA

ORDERING INFORMATION

Model	Part Number	Sys Height	CPU	Mry. Down	Operating Temp.	I/O	Display	Expansion
EC700-ADN	750-EC7004-100G	33mm	X7211E	8GB	0 to 60°C	• 3 USB-A + 1 USB-C • DFI OOB • 2 2.5GbE + 1 1GbE • 3 RS232/422/485 via DB9 • 1 RS232/422/485/DIO via DB9	• 1 HDMI • 1 VGA • 1 DP 1.2 Alt. Mode via USB-C *One more display output via USB-C by Opt.	• M.2 M key: PCIex2/SATA (auto detect) • M.2 B Key: USB3.0/USB2.0/PCIe • M.2 E Key: USB2.0/PCIe
	750-EC7004-500G		N97					
EC710-ADN	750-EC7004-000G	43mm	X7425E	16GB				
	750-EC7004-600G		I3-N305					

OPTIONAL ITEMS

Optional Items	Part Number	Description
Adapter	671-106012-000G	60W 12V inlet C14, locable DC Jack 5.5/2.5mm, cable length 1500mm
Power Cord	332-700010-201G	Power Cord US 3pin 1830mm Length
	A81-004003-000G	Power Cord EU 2pin 1830mm Length
	A81-000001-000G	Power Cord China 3pin 1830mm Length
	A81-000046-000G	Power Cord JP 3pin 1830mm length (with DFI PSE logo)
Mount Kits	761-EC7004-000G	EC700-AL/ADN Din Rail Kit
	761-EC7004-100G	EC700-AL/ADN Wallmount Kit
	761-EC7004-200G	EC700-AL/ADN VESA Kit

PACKING LIST

1 System unit

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Assured Systems

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