

MERA-3100 Series

Arestech

Rugged Box PC with Intel® 9th / 8th LGA1151 Processor



Features

- Supports 9th / 8th Gen Intel® CFL-R/S LGA 1151 Processors
- Triple Display Supported by VGA, DVI and DisplayPort
- 2 x DDR4 2400/ 2666MHz SO-DIMM, Max up to 64GB
- 3 x Intel GbE Ports, Support Wake-on-LAN and PXE
- 2 x CFast/ mSATA Connector
- 4 x Full-size Mini-PCIe and 4x SIM socket
- 9~48V DC Input with Built-in Ignition Power Control
- -40°C ~ 70°C Wide Temperature Operation

Applications

- Digital Signage Control Systems
- Factory Automation Applications
- Image Processing (e.g. Medical 2D and 3D imaging)
- Gaming and Entertainment Industries
- Network Communications

→ Packing List

Description
1 x MERA-3100 Series Machine
1 x Wall Mount Kit
1 x Power Cord

→ Optional Items

Part No.	Description
AWD-4G003	4G(LTE) EG25-G+ 2 antenna, Full size (for global)
AWD-WF001	Wi-Fi 802.11 bgn (1T1R) +1 Antenna (Single band), Half-size mini PCIe
AWD-WF003	wifi 802.11 a/b/g/n/ac/BT4.0 (2T2R) + 2 antenna(dual band), mini PCIe Half size
i7-9700TE	Intel® Core™ i7-9700TE (8-Cores, up to 3.8 GHz, 35W TDP)
i5-9500TE	Intel® Core™ i5-9500TE (6-Cores, up to 3.6 GHz, 35W TDP)
i7-8700T	Intel® Core™ i7-8700T (6-Cores ,up to 4.0 GHz, 35W TDP)
i5-8500T	Intel® Core™ i5-8500T (6-Cores, up to 3.5 GHz, 35W TDP)
i3-8100T	Intel® Core™ i3-8100T (4-Cores, up to 3.1 GHz, 35W TDP)
55000-0023-M5	Adapter AC/DC 24V 5A 120W with 3pin Terminal Block Plug 5.0mm Pitch
55000-0024-M5	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
5E000-0060-AV	Internal Fan (70 x 70 x25 mm) Module Kit
AWD-kit2USB30	mini PCIe to 2 USB3.0
AWD-kit2LAN	mini PCIe to 2 LAN
AWD-kit2COM	mini PCIe to 2 COM RS 422/485

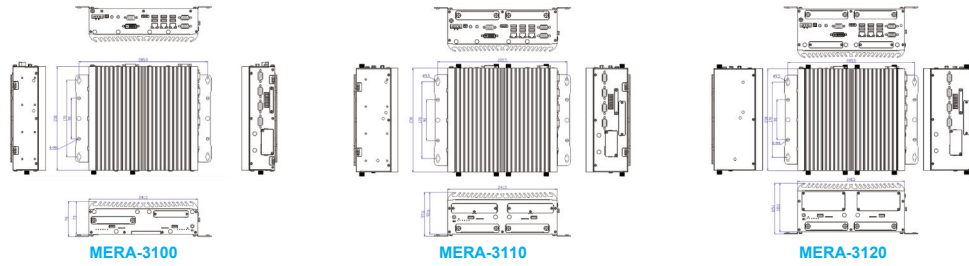
→ Ordering Information

Part No.	Description
MERA-3100	Intel® 8th/9th LGA 1151 Superior fanless box pc with 3x LAN, 6x USB 3.0, 2x USB2.0, 6x RS232/422/485, 1x DVI-D, 1x DP, 1x VGA, 1x Universal I/O Bracket, 1x Internal 2.5" SATA HDD Bay, 1x Removable 2.5" SATA HDD Bay
MERA-3110	Intel® 9th/8th LGA 1151 Superior fanless box pc with 3x LAN, 6x USB 3.0, 2x USB2.0, 6x RS232/422/485, 1x DVI-D, 1x DP, 1x VGA, 1x Universal I/O Bracket, 4x Removable 2.5" SATA HDD Bays
MERA-3120	Intel® 9th/8th LGA 1151 Superior fanless box pc with 3x LAN, 6x USB 3.0, 2x USB2.0, 6x RS232/422/485, 1x DVI-D, 1x DP, 1x VGA, 3x Universal I/O Brackets, 4x Removable 2.5" SATA HDD Bays

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→ Dimensions



→ Specifications

Model		MERA-3100	MERA-3110	MERA-3120
Processor System	CPU	LGA 1151 Processors 9th / 8th Intel® Core™ i3 / i5 / i7 Desktop 35W		
	System Chipset	Intel® Q370 Express Chipset		
	BIOS	AMI BIOS, 64Mbit SPI Flash ROM Built on Board		
Memory	Technology	Dual Channel DDR4 2400/2666 MHz SO-DIMM		
	Max. Capacity	64 GB (un-buffered and non-ECC)		
	Socket	2 DDR4 260-pin SO-DIMM		
Display	Graphics Engine	Integrated Intel® UHD Graphics 630 (Core™ i7/ i5/ i3) : Integrated Intel® UHD Graphics 610 (Pentium/ Celeron)		
	VGA	1 x VGA (1920 x 1080)		
	DVI-D	1 x DVI-D (1920 x 1200)		
	HDMI	N/A		
	Display Port	1 x DP (3840 x 2160)		
Multi Display	Yes			
I/O Interface	USB	8 (6 x USB3.2, 2 x USB2.0)		
	Serial	6 x COM (RS-232/422/485), with Auto Flow Control, DB9		
	GPIO	8 x Isolated DI and 8 x Isolated DO Port, 2x9-Pin Terminal Block		
	Ethernet	3 x GbE RJ45, GbE1: Intel® i219-LM GbE (Support Wake-on-LAN and PXE) GbE2~GbE3: Intel® i210-AT GbE (Support Wake-on-LAN and PXE)		
	Audio	Lin out, Mic in		
	CMOS Battery	1x Removable CMOS Battery, 1x External Clear CMOS Switch		
Expansion	Universal I/O Bracket	1 x Universal I/O Bracket	1 x Universal I/O Bracket	3 x Universal I/O Bracket
	miniPCIe/ M.2 Slot	2 x Full-size Mini-PCIe Socket (mux with mSATA), 2x Full-size Mini-PCIe Socket		
	SIM Socket	4 x SIM Sockets		
	Antenna Hole	10 x Antenna Holes		4 x Antenna Holes
Storage	PCI/ PCIe Slot	N/A		
	HDD/SSD	2 x 2.5" SATA HDD Bay (1x Removable, 1 x Internal)	4 x Removable 2.5" SATA HDD Bay	4 x Removable 2.5" SATA HDD Bay
	RAID	RAID 0, 1	RAID 0, 1, 5, 10	RAID 0, 1, 5, 10
	CFast Socket	2 x CFast Socket (Shared by 2x mSATA)		
Power	mSATA/M.2	2 x mSATA Socket (Shared by 2x Mini-PCIe and 2x CFast)		
	Power On Model	AT/ATX		
	Power Supply Voltage	Power Supply: 9~48V DC (Power Ignition Sensing)		
	Power Connector Type	1 x 3-pin Terminal Block Connector		
	Power Consumption (Max.)	Max: 7.5A @ 12 V (90W)		
	Battery	CR2032; 3.3V		
	Power Connector Type	1 x AT/ATX Mode Switch		
	Protection	Over Voltage Protection (OVP) up to 52V Reverse Voltage Protection (RVP) up to -48V Over Current Protection (OCP) 20A		
Mounting	Car Mode	1 x PC/Car Mode Switch		
	Type	Wall Mounting/Stand Mounting		
Environment	Operating Temperature	-40°C to 70°C (with Industrial Grade Peripherals)	35W CPU: -40°C to 70°C 65W CPU: -40°C to 60°C (Optional internal fan kit is required)	35W CPU: -40°C to 70°C 65W CPU: -40°C to 60°C (Optional internal fan kit is required)
	Storage Temperature	-40°C to 80°C		
	Humidity	10%~95% (Non-condensing)		
	Vibration	5 Grms, 5-500 Hz, 3 Axis		
	Shock	50 Grms, Half-sine 11 ms		
General	Certification	CE/FCC		
	Thermal Dissipation	Fanless System(35W) : Fanbased System(65W)		
	Material	Extruded Aluminum with Heavy Duty Metal		
	Dimensions (W x H x D)	241.5 x 230 x 73 mm	241.5 x 230 x 92.6 mm	241.5 x 230 x 92.6 mm
	Net Weight	3.3 kg	3.95 kg	4.1 kg
	Operating System	Windows 10 (IoT / Professional), Linux		