

# MS-C903

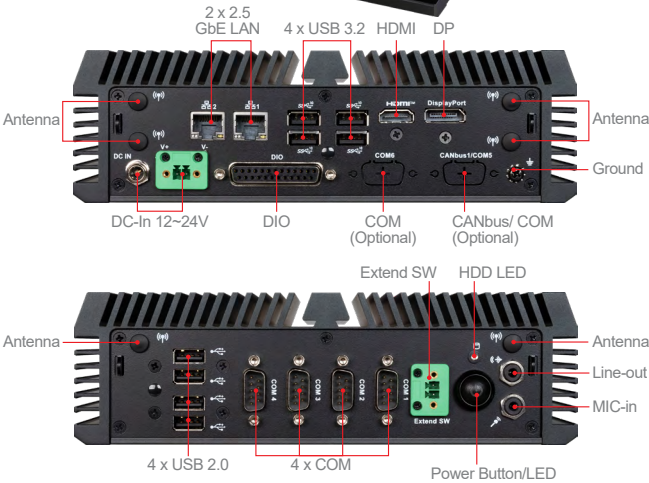
Compact-Size Box PC with Intel® Tiger Lake-UP3 Processor for Ultra Low-Power Fanless Solution



NEW

## Specifications

		Embedded SKUs	Industrial SKUs
<b>System Processor</b>	CPU	Intel® Mobile 11th Gen Tiger Lake-UP3 Series Processors, Core™ i3-1115G4E / i5-1145G7E / i7-1185G7E	Intel® Mobile 11th Gen Tiger Lake-UP3 Series Processors, Core™ i3-1115GRE / i5-1145GRE
	Frequency	2.20 GHz~4.4 GHz (Depends on CPU)	
	L2 Cache	6M~12M (Depends on CPU)	
	CPU Type	BGA	
	Chipset	Integrated in SoC Process	
<b>Memory</b>	BIOS	AMI	
	Technology	Dual-channel DDR4 3200 MHz	
	Max. Capacity	Up to 64 GB	
<b>Graphic</b>	Socket	2 x 260-pin SO-DIMMs	
	Controller	Intel® Iris™ Xe Graphics (For i5/ i7 SKU) Intel® UHD Graphics (For i3 SKU)	
	Graphic Memory	Depends on CPU	
	Multiple Display	2 Independent displays	
<b>Ethernet</b>	Display Interface	HDMI 1.4 up to 4096 x 2160 @30Hz DP up to 7680 x 4320 @60Hz	
	Controller	2 x Intel® I225-LM GbE LAN	2 x Intel® I225-IT 2.5 GbE LAN (LAN Speed running at 1000/100/10Mbps when OP TEMP. over 70°C)
<b>Audio</b>	Controller	Realtek® ALC888S-VD2-GR HD Audio Codec	
<b>H/W Monitor</b>	Watchdog Timer	256-level Watchdog Timer	
	Smart Fan	N/A	
<b>TPM</b>	Controller	Infineon SLB9670VQ2.0/ FW7.85	Infineon SLB9670XQ2.0/ FW7.85
<b>Expansion Slot</b>	PCIe x16	N/A	
	M.2	1 x M.2 M key (PCIe Gen4 x4 NVMe), 2280 1 x M.2 B key (SATA 3.0, PCIe x1, USB 2.0, w/NANO SIM-Holder), 2242/3042 1 x M.2 E key (PCIe x1, USB 2.0), 2230	
	Mini-PCIe	N/A	
<b>Storage</b>	SATA	1 x 2.5" SSD Bay	
	RJ-45	2	
<b>I/O Interface</b>	Audio	1 x Mic-in 1 x Line-out	
	USB	4 x USB 2.0 4 x USB 3.2 Gen 2 6 x COM ports	
	Serial	COM1~4 RS-232/422/485, 0V/5V/12V COM5~6: Option by M.2 Module	
	GPIO	16-bit (Default 8 x GPI, 8 x GPO), 5V/0.5A	
	CANbus	1 (Option by M.2 Module)	
	HDMI	1	
	DVI	N/A	
<b>Power Supply</b>	DisplayPort	1	
	Antenna	6 openings reserved for antennas	
	DC Input	DC-in 12V~24V Wide-Range (OCP & OVP) Phoenix pluggable connectors with latch (V+, V-)	
<b>Environment</b>	Operating Temperature	-10~50°C (w/ WT devices) Note: Thermal w/ Airflow:0.7m/s	-20~70°C (w/ WT devices) Note: Thermal w/ Airflow:0.7m/s
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
	Vibration	IEC61373 Category 1, Class B	
<b>Physical characteristics</b>	Shock	IEC61373 Category 1, Class B	
	Dimensions (WxDxH)	215 x 155 x 65 mm	
	Weight	2.24 kg	
<b>Certification</b>	Mounting	Wall mount (STD)/DIN-rail mount(STD)/VESA mount(by BOM option)	
	EMC	CE, FCC Class A, VCCI, RCM, UKCA, BSMI	
<b>Software Platform</b>	Safety	BSMI	
	OS Support	Windows 10 IoT Enterprise 2021 LTSC (64-bit, 21H2) Windows 11 IoT Enterprise (64-bit, 22H2, Pre-scan) Linux (Support by request)	



## Features

- Intel® 11th Gen Tiger Lake-UP3 Embedded/Industrial SKU Series
- 2 DDR4 3200 MHz SODIMM Slots up to 64GB
- Dual independent displays: DP++ , HDMI
- 2 2.5GbE LAN with RJ-45
- 1 M.2 B key (with NANO SIM-holder) support 5G/LTE, 1 M.2 E key
- 1 M.2 M key, 1 SATA 3.0 for storage (2.5" SSD)
- 4 USB 3.2 Gen 2, 4 USB 2.0, 4 COM (4 RS-485), 2 COM or 1 CANbus (Option by M.2 Module), DIO, Audio
- Onboard TPM 2.0
- 6 opening reserved for antennas
- Anti-Vibration & Shockproof Design to Compliance IEC 61373
- Wide operating temperature: -20~70°C
- Wide Voltage DC-IN 12~24V (OCP & OVP)
- Ultra-Compact with fanless design

## Ordering Information

Part Number	Description
936-C903-001	MS-C903/706-C903-010/826-C903-010 1.0 STD, 3.5-INCH BARE BONE, FANLESS, INTEL TIGER LAKE-UP3 I3-1115G4E, 19V/90W ADAPTER, 1*SATA CABLE, 1*WALL MOUNT, 1*DIN-RAIL, 2*TERMINAL BLOCK, W/O MSI LOGO, SINGLE
936-C903-002	MS-C903/706-C903-020/826-C903-011 1.0 OPTA, 3.5-INCH BARE BONE, FANLESS, INTEL TIGER LAKE-UP3 I5-1145G7E, 19V/90W ADAPTER, 1*SATA CABLE, 1*WALL MOUNT, 1*DIN-RAIL, 2*TERMINAL BLOCK, W/O MSI LOGO, SINGLE
936-C903-003	MS-C903/706-C903-030/826-C903-012 1.0 OPTB, 3.5-INCH BARE BONE, FANLESS, INTEL TIGER LAKE-UP3 I7-1185G7E, 19V/90W ADAPTER, 1*SATA CABLE, 1*WALL MOUNT, 1*DIN-RAIL, 2*TERMINAL BLOCK, W/O MSI LOGO, SINGLE
936-C903-004	MS-C903/706-C903-040/826-C903-013 1.0 OPTC, 3.5-INCH BARE BONE, FANLESS, INTEL TIGER LAKE-UP3 I3-1115GRE, 19V/90W ADAPTER, 1*SATA CABLE, 1*WALL MOUNT, 1*DIN-RAIL, 2*TERMINAL BLOCK, W/O MSI LOGO, SINGLE
936-C903-005	MS-C903/706-C903-050/826-C903-014 1.0 OPTD, 3.5-INCH BARE BONE, FANLESS, INTEL TIGER LAKE-UP3 I5-1145GRE, 19V/90W ADAPTER, 1*SATA CABLE, 1*WALL MOUNT, 1*DIN-RAIL, 2*TERMINAL BLOCK, W/O MSI LOGO, SINGLE

## Optional Item

Part Number	Description
E22-9A95080-C22	VESA Mounting

## Packing List

Part Number	Description	Quantity
S93-0406700-S14	Adaptor 19V/90W	1
K1D-3012023-V03	SATA Cable with Power, 230mm	1
E22-9A59010-LA2	Wall Mounting Bracket	2
E49-1065009-P65	Screw for Wall Mounting	4
E25-9B01030-K23	Rubber for Wall Mounting	4
E24-9B02010-P09	DIN Rail	2
E41-1356002-P65	Screw for DIN Rail	4
NA1-1020141-SR2	Phoenix Terminal Plugged	2
E49-1303007-P65	Screw for HDD	4

MSI reserves the right to change the specifications without prior notices.