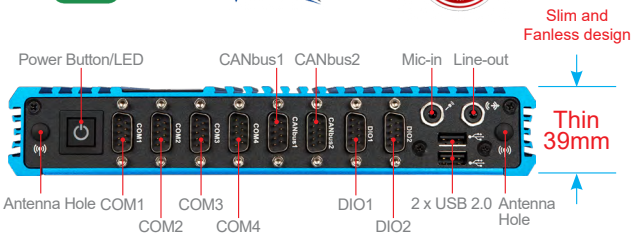
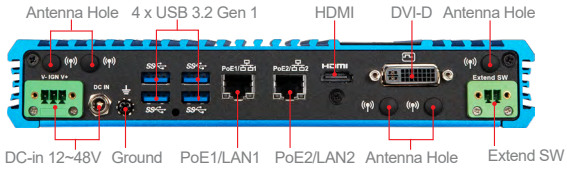
MS-9B17

In-Vehicle/Transportation Box PC with Intel® Apollo Lake-I for 2 PoE Ports, 2 CANBus 2.0B & Ultra Slim Fanless Solution

E-mark EN50155 ANTI-VIBRATION tested according to IEC 61373 SHOCKPROOF





Features

- Intel® Apollo Lake-I SoC
- LPDDR4 2133 MHz onboard memory up to 4GB
- Triple independent displays : DVI-D, HDMI (DP by option)
- 2 PoE/GbE LAN with RJ-45 (IEEE 802.11af compliant)
- 1 Mini-PCIe (Full size, with NANO SIM-Holder), 1 M.2 B Key (with NANO SIM-Holder)
- SATA 3.0 (1 x 2.5" HDD/SSD), M.2 M Key for storage
- 4 USB 3.2 Gen 1, 4 USB 2.0, 6 COM (2 RS-485), GPIO, Audio
- 7 openings reserved for antennas
- Onboard TPM 2.0
- Dual channel CANBus 2.0B
- Wide operating temperature : -20~70°C
- Wide voltage DC-IN 12~48V
- ESD: Contact 6KV/ Air 8KV
- Power on/off delay control for ignition (by option)
- Anti-Vibration & Shockproof Design to Compliance IEC61373
- Railway design to Compliance EN50155 TX Class
- E-Mark certified for in-vehicle applications

Ordering Information

Part Number	Description
Coming Soon	

Packing List

Part Number	Description
Coming Soon	

Specifications

System Processor	CPU	Intel® Atom™ x7 Processor E3950, QC, 12W
	Frequency	1.6 GHz, up to 2.0 GHz
	L2 Cache	2MB
	CPU Type	BGA
	Chipset	Integrated in SoC
	BIOS	AMI
Memory	Technology	Single-channel LPDDR4 2133 MHz
	Max. Capacity	Onboard up to 4GB
	Socket	Onboard
Display	Controller	Intel® HD Graphics
	Graphic Memory	Depends on CPU
	Multiple Display	2 independent displays
	Display Interface	DVI-D up to 1920 x 1200 @60 Hz HDMI up to 3840 x 2160 @30Hz
Ethernet	Controller	2 x Intel® I210-IT GbE LAN (W/ PoE IEEE 802.3af)
Audio	Controller	Realtek® ALC888 HD Audio Codec
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	N/A
TPM	Controller	Infineon SLB9665XT 2.0
Expansion Slot	M.2	1 x M Key (SATA 3.0), 2242 1 x B Key (PCIe x1, USB2.0), 3042
	Mini-PCIe	1 x Full-size (w/ SIM holder)
Storage	SATA	1 x 2.5" HDD/SSD Bay
I/O Interface	RJ-45	2
	PoE	2 x IEEE 802.3af
	Audio	1 x Mic-in 1 x Line-out
	USB	2 x USB 2.0 4 x USB 3.2 Gen 1
	Serial	4 x COM ports COM1~2: RS-232/422/485 COM3~4: RS-232
	Parallel	N/A
	PS/2	N/A
	GPIO	16-bit (8*GPI; 8*GPO), 5V
	CANbus	2 x CANBus 2.0B
	HDMI	1
	LVDS	N/A
	DVI	1 (DVI-D)
	DisplayPort	1 (Co-lay HDMI by option)
	VGA	N/A
	Antenna	7
Power Supply	DC Input	DC-in 12~48V Wide-Range Phoenix pluggable connectors with latch (V-, IGN, V+)
	AC Input	N/A
Environment	IP Rating	N/A
	Operating Temperature	-20 ~ 70°C (w/ WT SSD/mSATA) 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
	Shock	IEC61373 Category 1, Class B
Form Factor	Dimensions (W x D x H)	235 x 170 x 39 mm
	Weight	1.52 kg
	Weight	Wall mount (STD)/DIN-rail mount(STD)/VESA mount(by BOM option)
Certification	EMC	CE, FCC, VCCI, RCM, BSMI E-mark & EN50155 (by request)
	Safety	BSMI
Software Platform	OS Support	Windows 10 IoT Enterprise LTSC/SAC 1809 (64-bit, RS5) Linux (Support by request)

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