

# MS-9A84

M12 I/O Box PC with Intel® Kaby Lake-U Series Processor for Ultra Low-Power Fanless Solution

**NEW**



Power Button DC IN COM1 COM2



LAN2 LAN1 2 x USB3.0 HDMI

## Features

- Ultra low power with fanless design
- 1 independent display: HDMI support up to 1920x1080@60Hz
- M12 type I/O connector design : 1\*HDMI, 2\*GbE LAN, 2\*USB 3.0, 2\*COM and 1\*DC-in
- Dual Mini-PCIe for expansion
- Support DC in 12V~24V

## Ordering Information

Part Number	Description
939-9A84-002	MS-9A84\709-9A84-020 \829-9A84-005\ BAREBONE, STD VER 11, W/CPU CORE i3-7100U, 1*SATA CABLE, W/O LOGO, for Channel

## Packing List

Part Number	Description	Quantity
K1D-1012064-V03	SATA CABLE, 200mm	1

## Optional Item

Part Number	Description
K39-3001183-V03	External M12 DC Cable, 1000mm
K3C-3001033-V03	External M12 HDMI Cable, 2100mm
K37-3001058-V03	External M12 USB 3.0 Cable, 1000mm
K3B-3001017-V03	External M12 RJ45 Cable, 1800mm
K3B-3001018-V03	External M12 RJ45 Cable, 500mm
K3A-3001015-V03	External M12 RS232 Cable, 1800mm

## Specifications

Processor	CPU	Intel® Kaby Lake-U Core™ i3-7100U Processor, DC, 15W
	Frequency	2.4GHz
	L2 Cache	3MB
	CPU Type	BGA
	Chipset	Integrated in Process
	BIOS	AMI
Memory	Technology	Single channel for DDR4 2133 MHz
	Max. Capacity	Up to 16GB
	Socket	1 x 260-pin SO-DIMMs
Display	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	Multiple Display	1 independent display
	Display Interface	HDMI1.4 up to 1920 x 1080 @60Hz
Ethernet	Controller	1 x Intel® I210-AT GbE LAN 1 x Intel® I219-LM GbE LAN PHY
Audio	Controller	Realtek® ALC887-VD2-CG HD Audio Codec
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	N/A
Expansion Slot	Mini-PCIe	2 x Full-size (Mini-PCIe1 Slot w/ NANO SIM-Holder) (Mini-PCIe2 Slot w/ mSATA)
	SATA	1 x 2.5" HDD/SSD Bay
Storage	mSATA	1 x Full-size
	CFast	N/A
	CompactFlash	N/A
	RJ-45	2
I/O Interface	Audio	N/A
	USB	2 x USB 3.0
	Serial	2 x COM ports COM1:RS-232/422/485 (without power) COM2:RS-232 (without power)
	GPIO	N/A
	CANbus	N/A
	HDMI	1
	LVDS	N/A
	DVI	N/A
	DisplayPort	N/A
	VGA	N/A
	Antenna	N/A
Power Supply	DC Input	DC-in 12V~24V
	AC Input	N/A
Environment	Operating Temperature	-10~45°C (HDD) -10~60°C (w/ WT Memory, SSD/mSATA)
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
	Vibration	Operating: 0.5 Grms, 5-500Hz, 3axes (w/ HDD)
	Shock	Operating: 3 G, half sine 11 ms duration (w/ HDD)
Form Factor	Dimensions (WxDxH)	215 x 155 x 55 mm
	Weight	1.66 kg
	Mounting	N/A
Certification	EMC	FCC Class A, CE, RCM, VCCI, BSMI
	Safety	BSMI
Software Platform	OS Support	Windows 10 (64-bit) Linux Fedora 25 (by request) Linux Ubuntu 16.04 (by request)