



Specifications

Processor	CPU	Intel® Celeron® Processor J1900/N2920
	Frequency	2 GHz (Quad Core, for J1900) 1.86 GHz (Quad Core, for N2920)
	L2 Cache	2 MB
	CPU Type	BGA
	Chipset	Integrated
Memory	BIOS	AMI
	Technology	Dual-channel DDR3L 1333/1066 MHz
	Max. Capacity	Up to 8GB
Display	Socket	2 x 204-pin SO-DIMMs
	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	LVDS	Dual Channel 24-bit (add chrontel 7511B chipset)
	VGA	1
	HDMI	1
	Multiple Display	2 independent displays
Ethernet	Display Interface	VGA up to 1920 x 1200 HDMI up to 1920 x 1200 LVDS up to 1920 x 1200
	Controller	2 x Intel® i210-AT GbE LAN
Audio	Controller	Realtek® ALC887 HD Audio Codec
Super I/O	Controller	Fintek F81866AD-I
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Pin header
I/O Interface	USB	8 x USB 2.0 (4 x internal; 4 x rear) 1 x USB 3.0 (internal)
	Serial	6 x COM (COM1~2: rear; COM3~6: internal) COM1: RS-232/422/485, 0V/5V/12V COM2~6: RS-232, 0V/5V/12V
	PS/2	1 (Pin header)
	GPIO	8-bits (4 x GPI, 4 x GPO), 5V
Expansion Slot	PCI	1
	Mini-PCle	1 x Full-size, mSATA
Storage	SATA	1 x SATA 2.0
	mSATA	1
Power Supply	DC	DC-in 12V/19V/24V
	ATX	ATX-Power 20P
Environment	Operating Temperature	0 ~ 60°C
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
Form Factor	Storage Humidity	10 ~ 90%, non-condensing
	Dimensions	170mm x 170mm (Mini-ITX)
Certification	Weight	0.37 Kg
	EMC	FCC, CE, C-Tick, VCCI, BSMI

Features

- Support Intel® Bay Trail Quad Core 1.86/2GHz Processor
- Multiple video outputs: HDMI, VGA, and LVDS
- Intel® Gen7 graphics technology
- Optional DC/ATX power input by BOM
- Low power and fanless design

Ordering Information

Part Number	Description
919-98E3-001	MS-98E3 10 Intel Bay Trail D sku-J1900, DC, 1*Mini PCI_E+2*DDR3L SO DIMM, 1*PCI, 1*mini PCIe (with msata function), 8*USB 2.0, 1*USB 3.0, 6*COM
919-98E3-002	MS-98E3 10 OPT: A Intel Bay Trail D sku-J1900, ATX, 1*Mini PCI_E+2*DDR3L SO DIMM, 1*PCI, 1*mini PCIe (with msata function), 8*USB 2.0, 1*USB 3.0, 6*COM

Packing List

Part Number	Description	Quantity
K10-3004215-V03	DC power cable, 160mm	1
K1D-1012064-V03	SATA cable, 200mm	1
E21-98E3020-C22	I/O shield	1
G71-SEDC113-X03	Driver CD	1