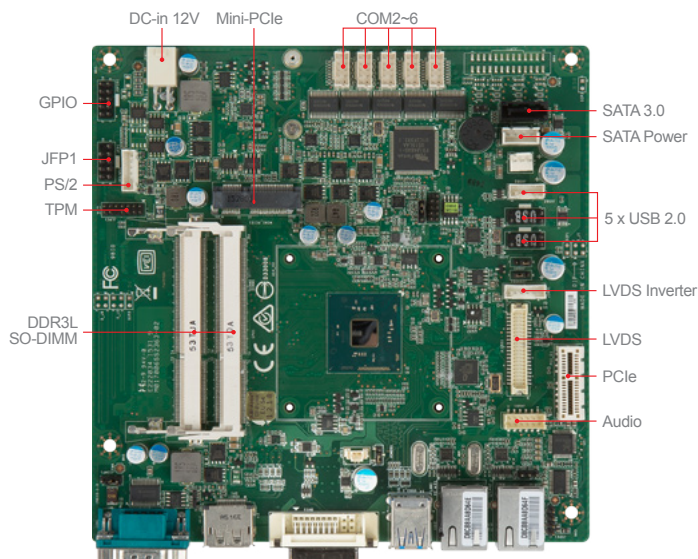


MS-9810

Mini-ITX with Intel® Atom™ Braswell Platform for Low-Power, Low profile and Fanless Solution



919-9810-103



919-9810-104



Features

- Intel® Atom™ Braswell Series SoC processor
- Embedded Mini-ITX Motherboard with low power, slim and fanless design
- 3 independent displays : 1 x DP/HDMI , 1x DVI-D, 1 x LVDS
- 5 x USB 2.0, 2 x USB 3.0, 6 x COM, and SATA3.0 supported
- TPM supported with onboard chip or pin header
- Supports DC 12V power
- Entry level with best-value for choice

Ordering Information

Part Number	Description
919-9810-103	MS-9810\609-9810-030\809-9810-103 STD VER 1.0, FANLESS, Braswell CPU N3160, 1*SATA CABLE, 1*Power CABLE, I/O Shield, BULK
919-9810-104	MS-9810\609-9810-040\809-9810-104 STD VER 1.0, FANLESS, Braswell CPU N3060, 1*SATA CABLE, 1*Power CABLE, I/O Shield, BULK

Packing List

Part Number	Description
E21-9810010-C22	I/O Shielding (2 x LAN)
E21-9810020-C22	I/O Shielding (1 x LAN)
G71-SEDC146-N56	Driver CD
K1D-1012064-V03	SATA Cable, 200mm
K10-3004215-V03	DC power cable, 160mm

Specifications

Processor	CPU	Intel® Pentium processor N3710, QC, 6W Intel® Celeron processor N3160, QC, 6W Intel® Celeron processor N3060, DC, 6W Intel® Celeron processor N3010, DC, 4W
	Frequency	N3710, 1.6 GHz, up to 2.56 GHz N3160, 1.6 GHz, up to 2.24 GHz N3060, 1.6 GHz, up to 2.48 GHz N3010, 1.04 GHz, up to 2.24 GHz
	L2 Cache	2MB
	CPU Type	BGA
	Chipset	Integrated
Memory	BIOS	AMI
	Technology	Dual-channel DDR3L 1333/1600 MHz
	Max. Capacity	Up to 8 GB
	Socket	2 x 204-pin SO-DIMMs (1 slot for opt SKU)
Display	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	LVDS	Dual channel 24-bit
	DVI	1 (DVI-D)
	HDMI	1 (colay with DP)
	DisplayPort	1 (colay with HDMI)
	Multiple Display	3 independent displays
	Display Interface	LVDS up to 1920 x 1200 DP up to 3840 x 2160 HDMI up to 1920 x 1200 DVI up to 1920 x 1200
Ethernet	Controller	2 or 1 x Realtek® RTL8111G-CG GbE LAN (depends on SKU)
Audio	Controller	Realtek® ALC887 co-layer ALC888S
Super I/O	Controller	Fintek F81866AD-I
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Pin header (default) Infineon SLB9635TT 1.2 (by BOM option)
I/O Interface	USB	2 x USB 3.0 (rear) 5 x USB 2.0 (internal)
	Serial	6 x COM (1 x rear; 5 x internal) COM1: RS-232/422/485, 0V/5V/12V COM2~6: RS-232, w/o power
	Parallel	1 (by BOM option)
	PS/2	1 (pin header)
	GPIO	8-bits (4 x GPI; 4 x GPO), 5V
Expansion Slot	PCIe x 1	1
	M.2	N/A
	Mini-PCle	1 (Full size co-layer mSATA, support Half size card)
Storage	SATA	1 x SATA 3.0
	mSATA	1 (support by mini PCIe slot)
Power Supply	DC	DC-in 12V
	ATX	N/A
Environment	Operating Temperature	0 ~ 60°C
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
Form Factor	Dimensions	170mm x 170mm (Mini-ITX)
	Weight	0.37 kg
Certification	EMC	FCC, CE, RCM, VCCI
Software Platform	OS Support	Windows 7 (32/64-bit) Windows 8.1 (64-bit) Windows 10 (64-bit) Linux Ubuntu 14.04.3 & Fedora 20

Optional Items

Part Number	Description
K14-1018003-V03	COM port cable, 300mm
K1B-3008012-E06	USB 2.0 Cable, 330mm