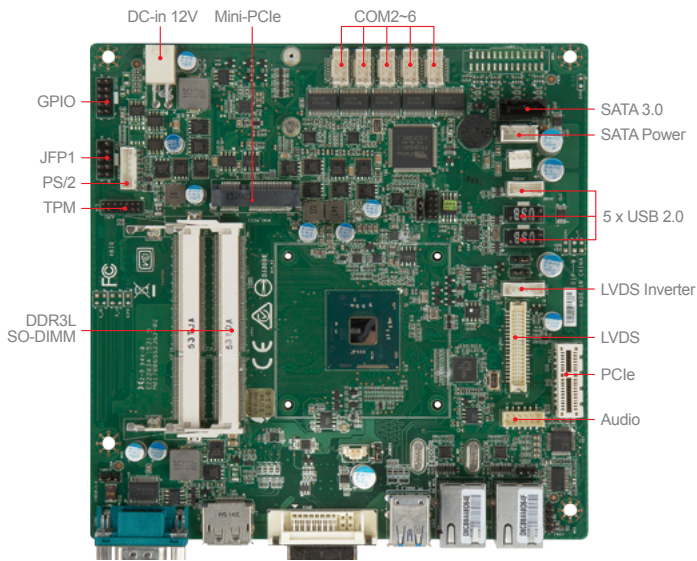
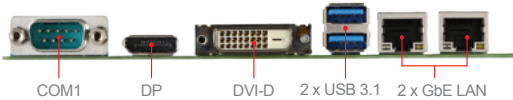


MS-9810

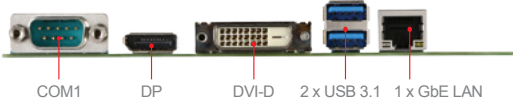
Mini-ITX with Intel® Atom™ Braswell Platform Low-Power, Slim/ Low-Profile & Fanless Solution



919-9810-103



919-9810-104



Features

- Intel® Braswell Series SoC
- 2 DDR3L 1600/1333 MHz SODIMM slots up to 8GB
- Triple independent displays: DVI-D, DP(HDMI by option), LVDS
- 2 GbE LAN with RJ-45
- 1 PCIe x1(Gen 2), 1 Mini-PCIe (Full/Half size, with mSATA) slots
- mSATA, SATA 3.0 for storage
SATA RAID 0/1
- 2 USB 3.2 Gen 1, 5 USB 2.0, 6 COM(1 RS485), GPIO, LPT(by option), PS/2, Audio, S/PDIF, System FAN
- Onboard TPM 1.2 (by option)
- DC-IN 12V

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 8GB	
Display	Socket	2 x 204-pin SO-DIMMs (1 slot for opt SKU)	
	Controller	Intel® HD Graphics	
	Graphic Memory	Depends on CPU	
	LVDS	Dual channel 24-bit	
	DVI	1 (DVI-D)	
	HDMI	1 (colay with DP)	
	DisplayPort	1 (colay with HDMI)	
Ethernet	Multiple Display	3 independent displays	
	Display Interface	LVDS up to 1920 x 1200 @60Hz DP up to 3840 x 2160 @30Hz HDMI up to 1920 x 1200 @60Hz DVI up to 1920 x 1200 @60Hz	
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)	
	USB	USB	5 x USB 2.0 (internal) 2 x USB 3.1 Gen 1 (rear)
		Serial	6 x COM ports (COM1: rear, COM2~5: internal) COM1: RS-232/422/485, 0V/5V/12V COM2~6: RS-232, w/o power
	I/O Interface	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-PCIe	1 x 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	170 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 Fedora 20 Linux Ubuntu 14.04.3	

Optional Item

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