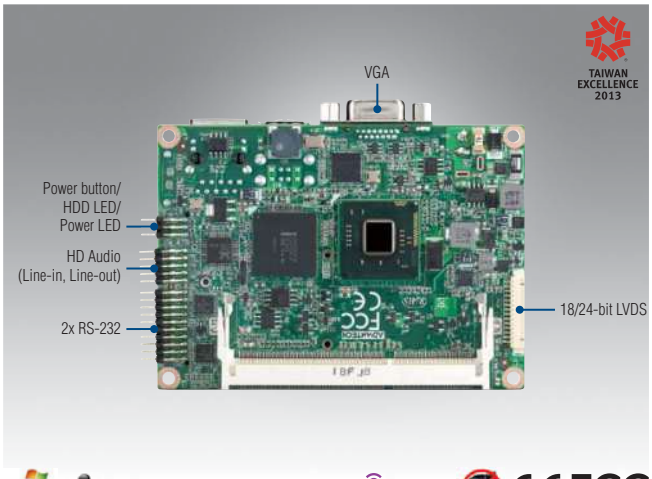
MIO-2261

Intel® Atom™ N2600/ N2800 Pico-ITX SBC, DDR3, 18/24-bit LVDS, VGA, 1 GbE, Half-size Mini PCIe, 4 USB, 2 COM, SMBus/I²C, mSATA & MIOe



Features

- Embedded Intel® Atom™ Dual-Core processor N2600/ N2800 + Intel NM10, 1 x DDR3 memory support up to 4 GB
- DirectX 9, Dual Independent display: 18/24-bit LVDS + VGA
- Flexible design using integrated multiple I/O: MIOe to approach vertical applications & keep domain knowhow
- Intel GbE support, Rich I/O interface with 2 COM, 1 SATA, 4 USB 2.0, GPIO, SMBus, mSATA, and MIOe expansion interface
- Supports SUSIAccess and Embedded Software APIs

Software APIs: GPIO, H/W Monitor, Brightness, Watchdog, Backlight On/Off, SMBus/ I²C, CPU Speed, System Throttling

Utilities: BIOS Flash, Monitoring

Specifications

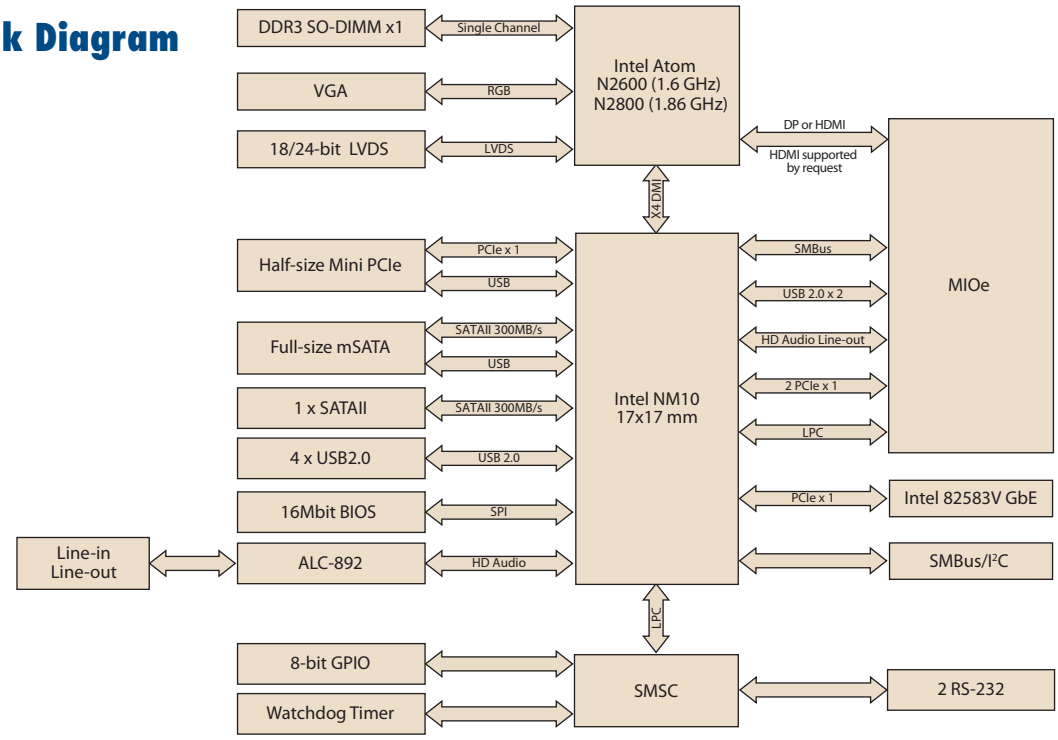
Processor System	CPU	Intel Atom Dual-Core N2600 1.6 GHz/ N2800 1.86 GHz
	Frequency	Dual Core 1.6 GHz/ 1.86 GHz
	L2 Cache	1 MB
	System Chipset	Intel Atom N2600/ N2800 + Intel NM10
	BIOS	AMI EFI 16 Mbit
Memory	Technology	DDR3 800 MHz (N2600), DDR3 1066 MHz (N2800)
	Max. Capacity	4 GB
	Socket	1 x 204-pin SODIMM
Display	Controller	Integrated Intel GMA 3600 Series
	Graphic Engine	DirectX 9 and OpenGL3.0 support HW Accelerated Decode: MPEG2, H.264, VC-1
	LVDS	18/24-bit LVDS1: up to 1366 x 768
	VGA	Up to 1920 x 1200
	Dual Display	VGA+LVDS
Ethernet	Speed	10/100/1000Mbps
	Controller	Intel 82583V
	Connector	RJ45
Audio	Chipset	Realtek ALC892, High Definition Audio (HD), Line-in, Line out
WatchDog Timer		Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds
Storage	mSATA	1 (Integrates USB signal, supports either mSATA or USB interface module)
	SATA	1, up to 3Gb/s (300MB/s)
Rear I/O	Ethernet	1
	VGA	1
	USB	2 x USB 2.0
	DC Power Jack*	1
Internal I/O	USB	2 x USB 2.0
	Serial	2 x RS-232(ESD protection for RS-232: Air gap ±15kV, Contact ±8kV)
	I²C*	1 (Shares with SMBus pin, supported by request)
	SMBus	1
	GPIO	8-bit general purpose input/output
Expansion	Mini PCI Express	1 x Half-size
	MIOe	SMBus, 2 x USB2.0, LPC, 2 x PCIe x1, line out, DisplayPort/HDMI*, +5 Vsb/+12 Vsb power, Power On, Reset
Power	Power Type	Single 12V DC power input (Supports DC power hot plug)
	Power Supply Voltage	Supports single 12V input, ± 10%
	Total peripheral power supply output	5V @ 3A for CPU board and MIOe module totally, 12V @ 2A for MIOe module
	Power Consumption (Typical)	N2600: 0.35 A @ 12 V (4.2 W) N2800: 0.46 A@ 12 V (5.52 W)
	Power Consumption (Max, test in HCT)	N2600: 0.76 A @ 12 V (9.12 W) N2800: 0.80 A @ 12 V (9.6 W)
	Power Management	ACPI
	Battery	3 V / 210 mAH
Environment	Operation	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)
	Non-Operation	-40° C ~ 85° C and 60° C @ 95% RH non-condensing
Physical Characteristics	Dimensions (L x W)	100 x 72 mm (3.9" x 2.8")
	Weight	0.48 kg (1.06 lb), weight of total package
	Total Height	Top Side: 15.65 mm (including heatsink); Bottom Side: 16.4 mm; PCB: 1.6 mm

* The specification is supported by request

All product specifications are subject to change without notice

Last updated : 15-Jan-2014

Block Diagram



Ordering Information

Part No.	CPU	L2 Cache	Memory	LVDS	GbE	HD Audio	VGA	USB 2.0	RS-232	mSATA	SATAII	MIOe	Mini PCIe	Power Connector	Thermal Solution	Operational Temp
MIO-2261N-S6A1E	Intel Atom N2600 1.6G	1MB	SO-DIMM	18/24-bit	1	Yes	Yes	4	2	Yes	1	Yes	Half-size	2x2 type	Passive	0 ~ 60° C
MIO-2261N-S8A1E	Intel Atom N2800 1.86G	1MB	SO-DIMM	18/24-bit	1	Yes	Yes	4	2	Yes	1	Yes	Half-size	2x2 type	Passive	0 ~ 60° C
MIO-2261Z-2GS6A1E	Intel Atom N2600 1.6G	1MB	2GB bundle	18/24-bit	1	Yes	Yes	4	2	Yes	1	Yes	Half-size	2x2 type	Passive	-20 ~ 80° C
MIO-2261Z2-2GS6A1E	Intel Atom N2600 1.6G	1MB	2GB bundle	18/24-bit	1	Yes	Yes	4	2	Yes	1	Yes	Half-size	2x2 type	Passive	-40 ~ 85° C
MIO-2261Z2-2GS8A1E	Intel Atom N2800 1.86G	1MB	2GB bundle	18/24-bit	1	Yes	Yes	4	2	Yes	1	Yes	Half-size	2x2 type	Passive	-40 ~ 85° C

Note: Passive = fanless; Active = with fan

Packing List

Part No.	Description	Quantity
	MIO-2261 SBC	1
	Startup Manual	1
	Utility CD	1
1700006291	SATA Cable 30cm	1
1700019656	SATA power cable 5P-1.25/5P-2.0+SATA 5P 15 cm	1
1701200220	RS-232 x 2 ports 2.0 mm pitch 22 cm	1
1700019156	Audio cable 2.0 mm pitch 20 cm (line in & line out)	1
1700002172	USB cable 2.0mm pitch USB-A(F) 17cm	1
1700019705	AT Power cable 12cm	1
9666226000E	Screw and stud pack (1 screw for Mini PCIe, 4 M3 studs and screws for heatsink)	1
1960055792T001	Heatsink (99.5 x 70.5 x 15.7 mm)	1

Optional Accessories

Part No.	Description
1960055791T001	MIO-2261 Heat spreader (99.5 x 70.5 x 15.7 mm)

Embedded OS/API

Embedded OS/API	Part Number	Description
WinCE 7.0	2070012214	WEC7 V1.0 ENG
Windows Embedded Standard		WES 2009 (graphic driver support by case)
Windows Embedded Standard 7	2070011558	WES7E MIO-2261 V5.1.4 EN/DE/JP/TC
	2070011559	WES7P MIO-2261 V5.1.3 EN/TC/SC/RU/FR/DE/ES/IT/JP/KR
VxWorks		6.9.2
Linux		Ubuntu 12.04 (graphic driver support by case)
Software API		SUSI V3.0

Rear I/O view



MIO-2261N-S6A1E
MIO-2261N-S8A1E



MIO-2261 w/ DC jack (by request)