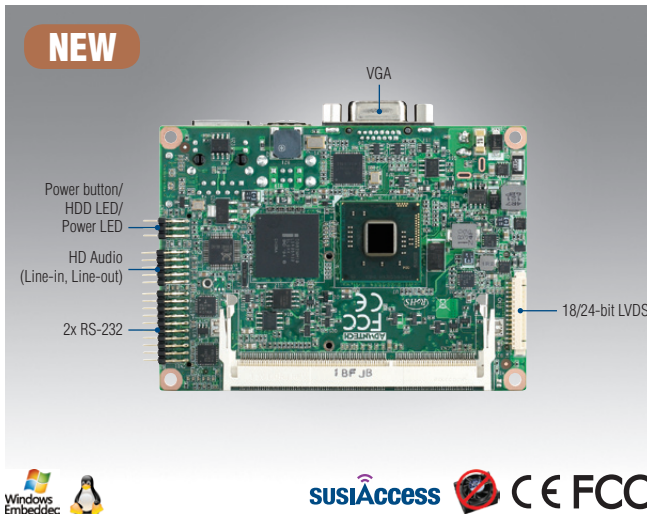


# MIO-2261

Intel® Atom™ N2600/ N2800 Pico-ITX SBC, DDR3, 18/24-bit LVDS, VGA, 1 GbE, Half-size Mini PCIe, 4 USB, 2 COM, SMBus, I<sup>2</sup>C, 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

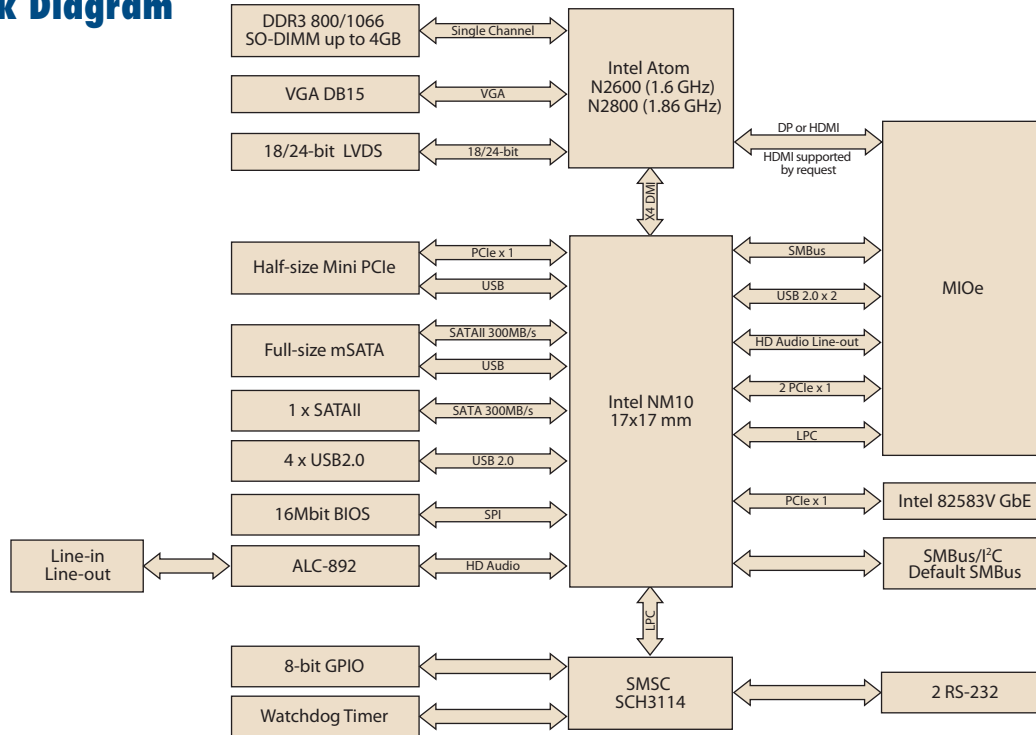
**Software APIs:** GPIO, H/W Monitor, Brightness Watchdog, Backlight On/Off, SMBus & I<sup>2</sup>C, CPU Speed, System Throttling

**Utilities:** BIOS Flash Monitoring, Eye 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
Memory	BIOS	AMI EFI 16 Mbit
	Technology	DDR3 800 MHz (N2600), DDR3 1066 MHz (N2800)
	Max. Capacity	4 GB
	Socket	1 x 204-pin SODIMM
Display	Chipset	Intel Atom N2600/ N2800
	Graphic Engine	DirectX 9 and OpenGL3.0 support H/W Decode/Acceleration: H.264, VC1, MPEG2
	LVDS	18/24-bit LVDS1: up to 1366 x 768
	VGA	Up to 1920 x 1200
Ethernet	Dual Display	VGA+LVDS
	Speed	10/100/1000Mbps
	Controller	GbE1 Intel 82583V 10/100/1000Mbps
Audio	Connector	RJ45
	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 x SATA II (Max. Data Transfer Rate 300 MB/s)
Rear I/O	Ethernet	1 (10/100/1000 Mbps)
	VGA	1
	USB	2 x USB 2.0
	DC Power Jack	1 (supported by request)
Internal I/O	USB	2 x USB 2.0
	Serial	2 x RS-232 (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV)
	I <sup>2</sup> C	1 (Shares with SMBus pin, supported by request)
	SMBus	1 (Shares with I <sup>2</sup> C, default support SMBus)
Expansion	GPIO	8-bit general purpose input/output
	Mini PCI Express	1 (half size)
	MIOe	MIOe (2 x USB 2.0, 2 x PCIe x1, LPC, HD Audio line-out, SMBus, DP or HDMI supported by request, 5 Vsb/12 Vsb power)
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	APM, ACPI, wake on LAN
Environment	Battery	3 V / 210 mAh
	Operation	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)
Physical Characteristics	Non-Operation	-40° C ~ 85° C and 60° C @ 95% RH non-condensing
	Dimensions (L x W)	100 x 72 mm (3.9" x 2.8")
	Weight	0.42 kg (0.93 lb), weight of total package
	Total Height	33.65 mm

### Block Diagram



### Ordering Information

Part No.	CPU	L2 Cache	Memory	LVDS	HD Audio	VGA	USB2.0	RS-232	mSATA	SATAII	MIOe	Mini PCIe	Thermal Solution	Operational Temp
MIO-2261N-S6A1E	Intel Atom N2600 1.6G	1MB L2	SO-SIMM	18/24-bit	Yes	Yes	4	2	Yes	1	Yes	Half-size	Passive	0 ~ 60° C
MIO-2261N-S8A1E	Intel Atom N2800 1.86G	1MB L2	SO-SIMM	18/24-bit	Yes	Yes	4	2	Yes	1	Yes	Half-size	Passive	0 ~ 60° C
MIO-2261Z-2GS8A1E	Intel Atom N2800 1.86G	1MB L2	2GB bundle	18/24-bit	Yes	Yes	4	2	Yes	1	Yes	Half-size	Passive	-20~80°C
MIO-2261Z2-2GS8A1E	Intel Atom N2800 1.86G	1MB L2	2GB bundle	18/24-bit	Yes	Yes	4	2	Yes	1	Yes	Half-size	Passive	-40~85°C

Note: Passive = fanless; Active = with fan

### Packing List

Part No.	Description	Quantity
	MIO-2261 SBC	
	Startup Manual	
	Utility CD	
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	CPU N2600/N2800 heatsink (99.5 x 70.5 x 15.7mm) for MIO-2261N	1

### Optional Accessories

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

### Embedded OS/API

Embedded OS/API	Description
WinCE 7.0	CE 7.0
Win XPE	WES 2009
2070011283	WES7E SP1 x32 MIO-2261 V5.1 ENG
Linux	Ubuntu 12.04
Software API	SUSI V3.0

### Rear I/O view



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

MIO-2261 w/ DC jack (by request)