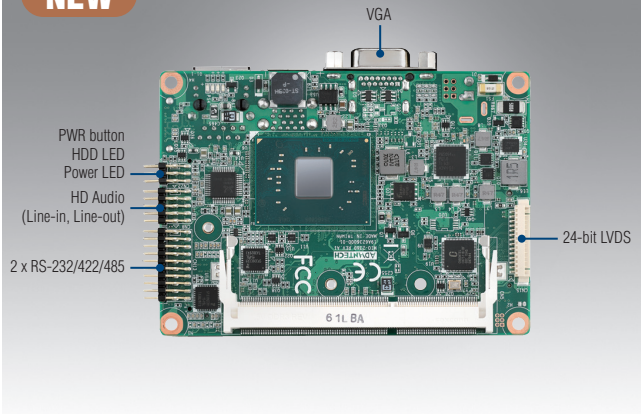


MIO-2360

Intel® Pentium N4200/Celeron N3350/Atom™ E3900 series Pico-ITX SBC

NEW



Features

- Intel® Pentium N4200/Celeron N3350/Atom™ E3900 series
- DDR3L 1866MHz support up to 8GB
- Dual display: 24-bit LVDS+VGA/HDMI
- mSATA & mPCIe for expansion and MIOe conn.
- USB3.0, SATA3.0, 2 x RS-232/422/485
- WISE-PaaS/RMM and Embedded Software APIs

Software APIs:

- GPIO
- H/W Monitor
- Brightness
- Watchdog
- Backlight On/Off
- SMBus

Utilities:

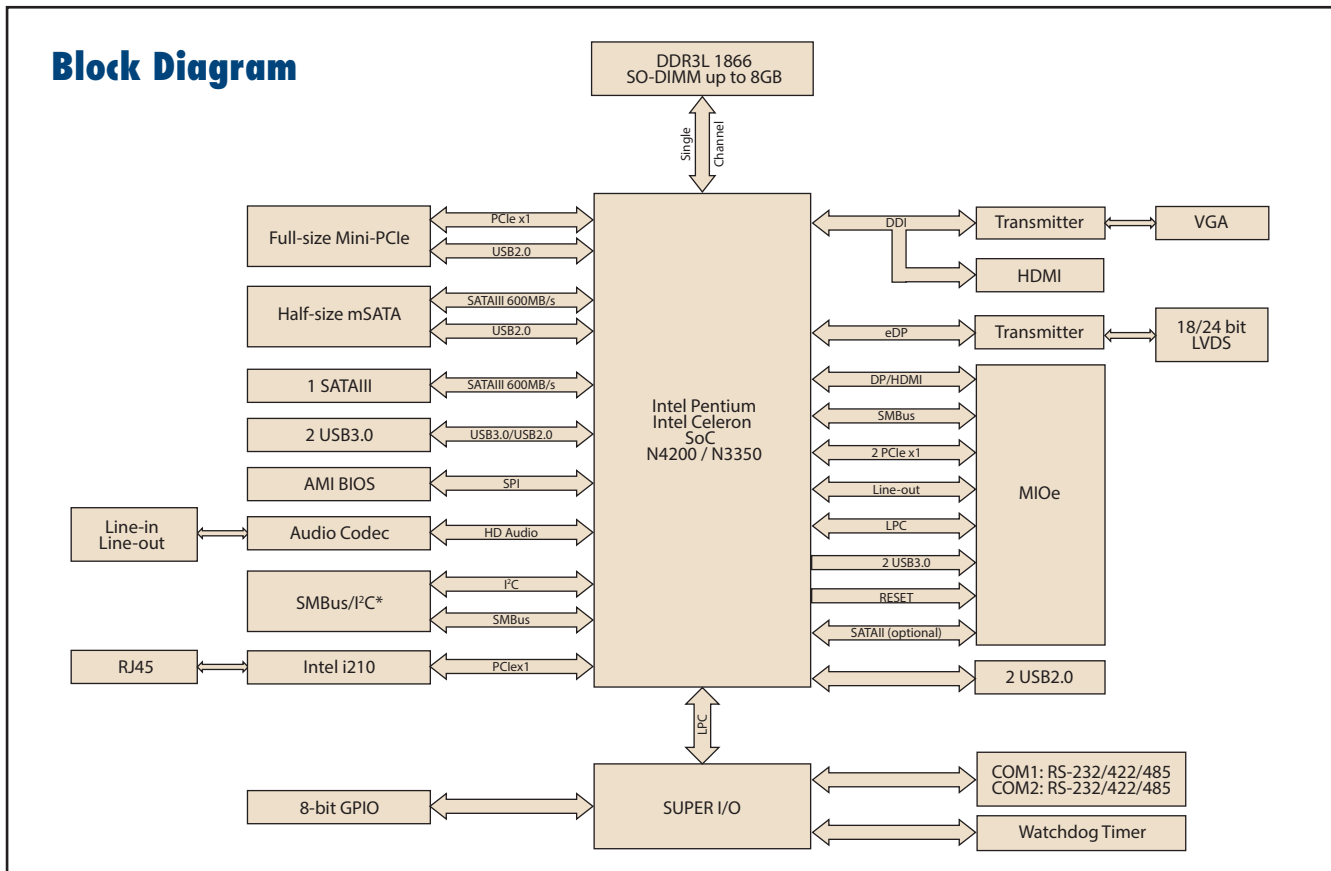
- Monitoring

Specifications

		Pentium N4200	Intel Celeron N3350	Intel Atom E3940	Intel Atom E3930
Processor System	CPU	Pentium N4200	Intel Celeron N3350	Intel Atom E3940	Intel Atom E3930
	Frequency	1.10 GHz (Quad-Core)	1.10 GHz (Dual-Core)	1.60 GHz (Quad-Core)	1.30 GHz (Dual-Core)
	L2 Cache	2 MB			
	Max Turbo Frequency	2.50 GHz	2.40 GHz	1.80 GHz	1.80 GHz
	System Chipset	Intel Celeron / Atom SoC processor integrated			
Memory	BIOS	AMI EFI 64 Mbit			
	Technology	DDR3L 1866 MHz			
	Max. Capacity	8 GB			
Display	Socket	1 x 204-pin SODIMM (Support 1.35V DDR3L)			
	Chipset	Intel® Celeron/Atom SoC integrated			
	Graphic Engine	DirectX 12.0, OpenGL 4.3, OpenCL 2.0 HW Decode: MPEG2, H.264 (L5.2), VC-1, WMV9, VP8, JPEG/MJPEG, H.265 (HEVC), MVC			
	LVDS	Supports single channel 24-bit LVDS Resolution: 1440 x 900 at 60Hz			
	VGA	Up to 1920 x 1200 at 60Hz			
Ethernet	HDMI	Up to 3840 x 2160 at 30Hz			
	Dual Display	Yes (VGA+LVDS+MIOe or HDMI+LVDS+MIOe)			
	Speed	10/100/1000 Mbps			
Audio	Controller	Intel i210			
	Connector	RJ45 on rear I/O			
Watchdog Timer	Chipset	Realtek ALC888S, High Definition Audio (HD), Line-in, Line-out			
		Output system reset, programmable counter from 1-255 minutes/seconds			
Storage	mSATA	1 x half size mini PCIe slot			
	SATA	1, up to 6Gb/s (600MB/s)			
Rear I/O	Ethernet	1			
	VGA	1			
	HDMI	1* (*support by request)			
	USB	2 x USB 3.0			
	DC Power Jack*	1			
Internal I/O	USB	2 x USB 2.0			
	Serial	2 x RS-232/422/485 from COM1 & COM2 with auto-flow control (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV)			
	SMBus	1			
	GPIO	8-bit general purpose input/ output			
Expansion	Mini PCI Express	1 x Full-size (*optional: 1 x Half-size)			
	MIOe	SMBus, 2 x USB3.0, LPC, 2 x PCIe x1, line out, DisplayPort/HDMI*, +5 Vsb/+12 Vsb power, Power On, Reset, SATA*			
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)	N4200: 0.41 A @ 12V (4.89 W) N3350: 0.39 A @ 12V (4.61 W) E3930: 0.37 A @ 12V (4.43 W)			
	Power Consumption (Max)	N4200: 1.09 A @ 12V (12.90 W) N3350: 1.44 A @ 12V (17.18 W) E3930: 0.97 A @ 12V (11.59 W)			
Environment	Power Management	ACPI			
	Battery	Lithium 3V/ 210mAh			
Physical Characteristics	Operation	0 - 60 °C with air flow 0.7m/s (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	0.47 kg (1.04 lb), weight of total package			
	Total Height	34.10 mm			

* Support by request

Block Diagram



Ordering Information

Part Number	CPU	Max. frequency	Core	Memory	VGA	Mini PCIe	Thermal solution	Operating Temp
MIO-2360N-S2A2	Pentium N4200E	2.50 GHz	4	8G	Yes	Yes	Passive	0 ~ 60 °C
MIO-2360N-S1A2	Celeron N3350E	2.40 GHz	2	8G	Yes	Yes	Passive	0 ~ 60 °C
MIO-2360AX-S8A2	Atom E3940	1.80 GHz	4	8G	Yes	Yes	Passive	-40 ~ 85 °C

Packing List

Part No.	Description	Quantity
	MIO-2360 SBC	1
	Startup Manual	1
1700006291	SATA cable 30cm	1
1700027546-01	A cable 1*5P-2.0/1*5P-2.0+SATA 15P 15cm MIO-2360	1
1701200220	RS-232 x 2 ports 2.0mm pitch 22cm	1
1700022444-01	Audio cable 2.0 mm pitch 20 cm (line-in & line-out)	1
1700002172	USB cable 2.0 mm pitch USB-A(F) 17 cm	1
1700019705	AT power cable 12 cm	1
9666226300E	Screw and stud pack (2 screw for Mini PCIe, 4 x M3 studs and screws for heatsink)	1
1960078695T001	MIO-2360 Heatsink for N series sku	1
1970004885T001	MIO-2360 Heatsink for E39XX sku	1

Optional Accessories

Part No.	Description
1960085302N001	MIO-2360 heatspreader for N series sku
IDK-1110WP-50XGA1E	10.1" LED PANEL 500N
IDK-1115P-50XGA1E	15" LED PANEL 500N
1960085302N011	MIO-2360 heatspreader for E39XX sku

Embedded OS/API

Embedded OS/API	Part No.	Description
WIN10	20706WX6ES0015	64-bit (UEFI mode only)
VxWorks	TBD	
Linux	TBD	
Software API	TBD	SUSI V4.0

Rear I/O View

