

PCM-9562

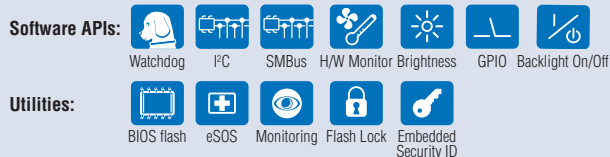
Intel® Atom N450/D510 EBX SBC with 3 LAN, 6 COM, 3 SATA, 8 USB2.0, UL60601 Isolation design, PC/104-Plus

Preliminary



Features

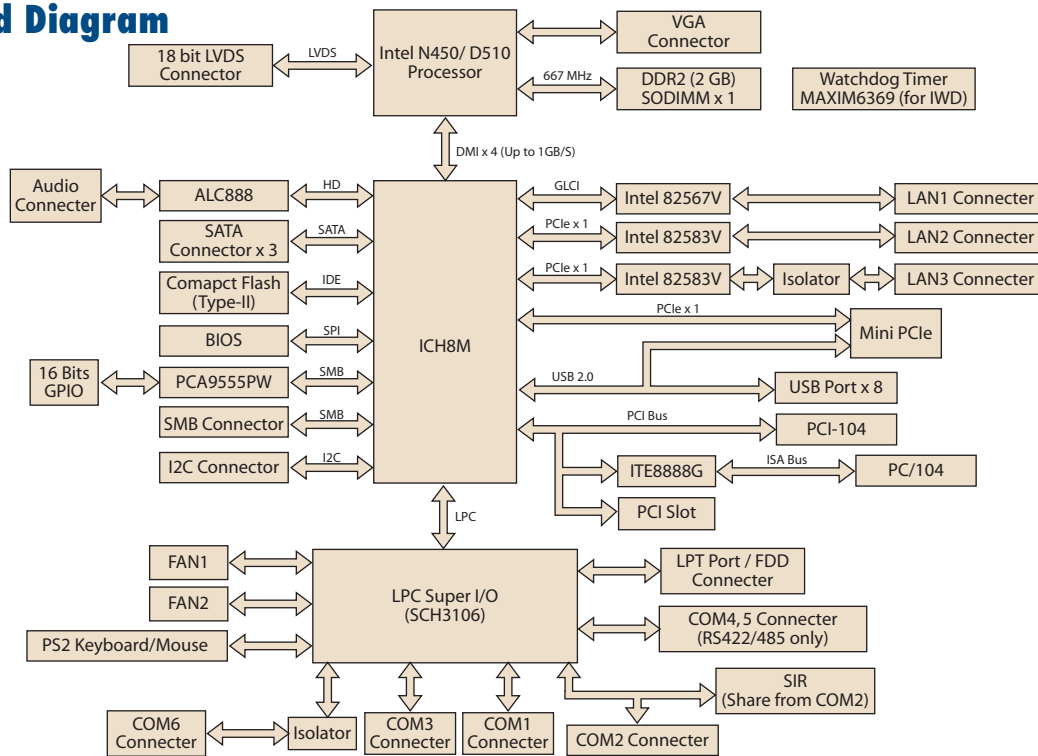
- Embedded Intel® Atom™ N450 Single Core/D510 Dual Core processor + ICH8M
- Support up to 3 Intel GbE Ethernet, 2 Watch Dog timer support
- Design complies with UL60601 on LAN3 and COM6 port isolation
- Power off protection and Software I²C API support
- Supports embedded software APIs and Utilities



Specifications

Processor System	CPU	Intel® Atom™ N450 Single Core 1.67 GHz Processor Intel® Atom™ D510 Dual Core 1.67 GHz Processor
	Front Side Bus	667 MHz
	Frequency	1.67 GHz
	L2 Cache	512 KB/1 MB
	System Chipset	Intel N450/D510 + ICH8M
Memory	BIOS	AMI 16 Mbit Flash BIOS
	Technology	DDR2 667 MHz
	Max. Capacity	2 GB
Display	Socket	1 x 200-pin SODIMM
	Chipset	Intel® Atom™ Processor N450/D510 1.67 GHz
	VRAM	Optimized Shared Memory Architecture up to 224 MB system memory
	Graphic Engine	Intel Gen 3.5 DX9, MPEG2 Decode in HW Embedded Gen3.5+ GFX Core
	LVDS	LVDS: Single channel 18-bit LVDS up to WXGA 1366 x 768
	CRT	Intel Atom N450 Single Core up to 1400 x 1050 (SXGA) Intel Atom D510 Dual Core up to 2048 x 1536
Ethernet	Dual Display	CRT+ LVDS
	Speed	10/100/1000Mbps on LAN1, LAN2, LAN3 (LAN3 is optional)
	Controller	LAN1 Intel 82567V Giga LAN LAN2 Intel 82583V Giga LAN LAN3 Intel 82583V Giga LAN is optional (UL60601 Compliant, Isolation design)
Audio	Connector	Box header
	Chipset	Realtek ALC888 High Definition Audio(HD),Line-in, Line-out, Mic-in, speaker out (R/L)
Storage	Amplifier	APA4863RI-TRG (Support 8W 1 W or 4W 2 W Speaker for Speaker-out)
	WatchDog Timer	Watchdog timer1 (IWD): monitor the system status before OS is ready (programmable 10ms, disable, 1s, 60s) Watchdog timer2 (PWD): monitor the application status after OS is ready (programmable 1 - 255 sec/min)
	CompactFlash	Card Type I, Type II
	SATA	3 SATA (Max. Data Transfer Rate 300 MB/s)
Internal I/O	Floppy	Share with LPT (Optional)
	On board Flash	SST25VF016B-50-4C-S2AF 16Mbit for BIOS
	Serial	RS-232 x4 (optional COM6 with isolation design) RS-232/422/485 x2 (Default RS-422/485, RS-232 by optional request)
	Ethernet	Giga LAN x 3 (RJ-45 connector through the cable and LAN3 is optional)
	KB/Mouse	1
	CRT	1
	Reset Button	1
	USB	8 x USB2.0
	Parallel(LPT)	1
	FDD	Share with LPT (Optional)
	SMBUS	1
	GPIO	16-bit GPIO
IrDA	115kbps (optional by request) shared from COM2	
Expansion	I²C	1
	PC/104-Plus slot	1
	Mini PCI Express	1
PCI Slot	1	

Board Diagram



Specifications Cont.

Power	Power Type	AT / ATX (Both AT/ATX can support ACPI)
	Power Supply Voltage	ATX: 12V ±10%, 5VSB ±5% (5V stand-by power is only for auto power off function) AT: 12V ±10% only
	Power Consumption (Typical)	PCM-9562N-S6A1E: 10.8 W (893 mA @ 12 V, 8 mA @ 5 VSB) PCM-9562D-S6A1E: 13.6 W (1130 mA @ 12 V, 10 mA @ 5 VSB)
	Power Consumption (Max, test in HCT)	PCM-9562N-S6A1E: 13.9 W (1159 mA @ 12 V, 6 mA @ 5 VSB) PCM-9562D-S6A1E: 16.9 W (1404 mA @ 12 V, 8 mA @ 5 VSB)
	Power Management	APM, ACPI
Environment	Battery	Lithium 3 V/196 Mah
	Operation	Operating: 0 – 60° C (32 – 140° F) (operation humidity: 40° C @ 85% RH Non-Condensing) Non-Operating: -40° C – 85° C and 60° C @ 95% RH Non-Condensing
	Non-Operation	Operating: 0 – 60° C (32 – 140° F) (operation humidity: 40° C @ 85% RH Non-Condensing) Non-Operating: -40° C – 85° C and 60° C @ 95% RH Non-Condensing
Physical Characteristics	Dimensions (L x W)	203 x 146 mm (8" x 5.75")
	Weight	0.85 kg (1.87 lb) (with Heatsink)

Ordering Information

Model	CPU	CRT	LVDS	Giga LAN1	Giga LAN2	Giga LAN3 UL60601	HD Audio	USB 2.0	SATAII	RS-232	RS-422/485	PC/104-Plus	Mini PCIe	CF	Thermal
PCM-9562N-S6A1E	Atom N450	1	1, 18-bit	1	1	Optional	Yes	8	3	3	2	Yes	1	1	Passive
PCM-9562D-S6A1E	Atom D510	1	1, 18-bit	1	1	Optional	Yes	8	3	3	2	Yes	1	1	Active

* For PCM-9562 with 3 LAN and 6 COM sku, pls contact with field sales rep. Minimum Order quantity is required.
(PCM-9562 has 3 LAN and 6COM sku with LAN3 and COM6 designed in for UL60601.)

Packing List

Part No.	Description	Quantity
	PCM-9562 SBC	x1
9689000002	Mini Jumper Pack	x1
2006956200	Startup Manual	x1
2066956200	Utility CD	x1
1700015741	ATX 5VSB CABLE	x1

Optional Accessories

Part No.	Description
PCM-10586-9562E	Wiring kit for PCM-9562
1703100260	USB cable
CF-HDD-ADP	CompactFlash 50-pin to IDE 44-pin adapter
170304015K	AT Cable 4P x 2/4200-H-4P 15 cm

Embedded OS

OS	Part No.	Description
OS	Win XPE	2070009030: XPE WES2009 Luna Pier V4.0 ENG 2070009031: XPE WES2009 Luna Pier V4.0 MUI24
	SUSI	205E956000: SUSI 3.0 SW API for PCM-9562 B:20091009 XP