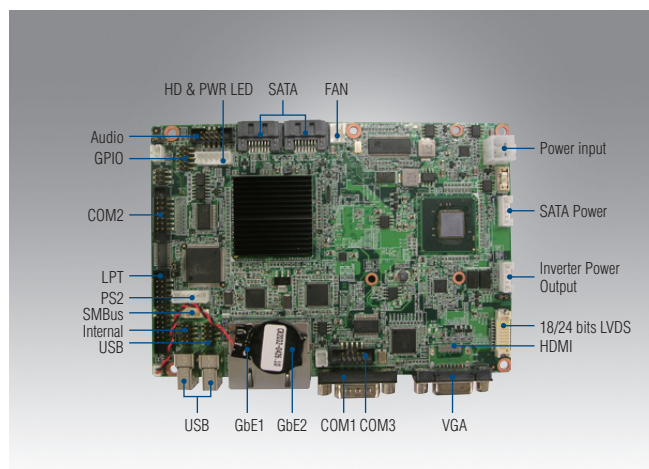


PCM-9363 Intel® Atom™ N455/D525 3.5" SBC, DDR3, 18/24-bit LVDS, VGA or HDMI, 2 GbE, Mini PCIe, 3 COM Ports



Features

- Embedded Intel® Atom™ N455 Single Core/ D525 Dual Core processor + ICH8M, DDR3 memory support
- Intel Gen 3.5 DX9, MPEG2 Hardware Decoder, multiple display: 18/24-bit LVDS, VGA or 1080P HDMI
- Supports extended temperature -40° C ~ 85° C
- Two Intel GbE connections; Rich I/O with 3 COM, 2 SATA, 6 USB and GPIO connectors
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



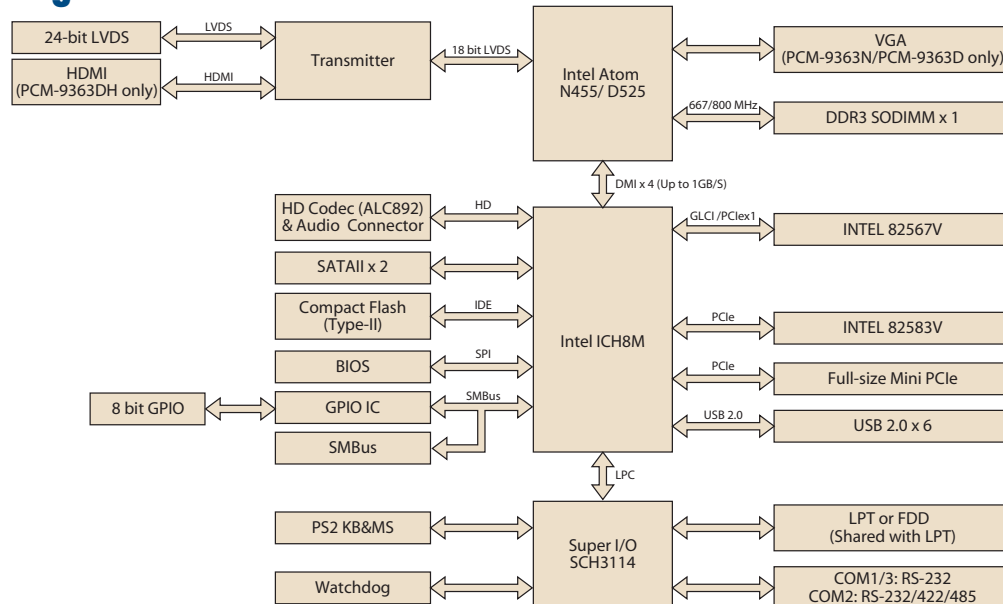
Utilities:



Specifications

Processor System	CPU	Intel Atom N455 Single Core 1.66 GHz Processor Intel Atom D525 Dual Core 1.8 GHz Processor
	Frequency	4 GB for D525, and 2 GB for N455
	L2 Cache	512 KB/1 MB
	System Chipset	Intel N455/D525 + ICH8M
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	DDR3 667 MHz for N455, 800 MHz for D525
	Max. Capacity	4GB for D525, and 2GB for N455
	Socket	1 x 204-pin SODIMM
Display	Chipset	Intel Atom Processor N455 1.66GHz/D525 1.8GHz
	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 18/24-bit LVDS up to WXGA 1366 x 768
	VGA	Intel Atom N455 Single Core up to 1400 x 1050 (SXGA), Intel Atom D525 Dual Core up to 2048 x 1536
	HDMI	Supported by request (the HDMI resolution has to be set with the Chronitel Utility in Windows XP/XP Embedded) Supports Hot Plug Detection (HPD) for HDMI
Ethernet	Speed	10/100/1000 Mbps (Supports Wake on LAN)
	Controller	GbE1 Intel 82567V, GbE2 Intel 82583V
	Connector	RJ-45 on GbE1, GbE2
Audio	Chipset	Realtek ALC892
WatchDog Timer		High Definition Audio (HD), Line-in, Line out, Mic-in Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds
Storage	CompactFlash	CompactFlash type I/II (Primary Master IDE Channel)
	SATA	2 SATA II (Max. Data Transfer Rate 300 MB/s), 1 internal SATA power connector
Rear I/O	Serial	1 (COM1 supports RS-232) (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV)
	Ethernet	2 (10/100/1000 Mbps)
	VGA	1
	HDMI	1 (only on PCM-9363DH)
	USB	2
Internal I/O	USB	4 x USB 2.0
	Serial	2 x COM (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV) COM3 supports RS-232, COM2 supports RS-232/422/485 (Supports RS-485 auto flow control)
	Parallel(LPT)	1
	SMBus	1
	PS/2 KB/Mouse	1
	GPIO	8-bit GPIO
Expansion	Mini PCIe	1 (Full-size)
Power	Power Type	AT
	Power Supply Voltage	Supports single 12V input, ± 10%
	Power Consumption (Typical)	PCM-9363N: 0.74 A @ 12 V (8.88 W) PCM-9363D: 0.86 A @ 12 V (10.32 W)
	Power Consumption (Max, test in HCT)	PCM-9363N: 0.86 A @ 12 V (10.32 W) PCM-9363D: 1.18 A @ 12 V (14.16 W)
	Power Management	APM, ACPI
	Battery	Lithium 3 V/210 mAH
Environment	Operational	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)
	Non-Operational	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Physical Characteristics	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.64 kg (1.41 lb), weight of total package 30.5mm for PCM-9363N
	Total Height	34.5mm for PCM-9363D/DH

Block Diagram



Ordering Information

Part No.	CPU	L2 Cache	Memory	LVDS	HDMI	VGA	GbE	Audio	RS-232	RS-232/422/485	USB 2.0	SATAII	CF	Mini PCIe	Thermal Solution	Operational Temp.
PCM-9363N-S6A1E	Atom N455	512 KB	SODIMM	18/24-bit	By request	Yes	2	Yes	2	1	6	2	1	Full-size	Passive	0 ~ 60° C
PCM-9363D-S8A1E	Atom D525	1 MB	SODIMM	18/24-bit	-	Yes	2	Yes	2	1	6	2	1	Full-size	Active	0 ~ 60° C
PCM-9363DH-S8A1E	Atom D525	1 MB	SODIMM	18/24-bit	1	-	2	Yes	2	1	6	2	1	Full-size	Active	0 ~ 60° C
PCM-9363NZ-1GS6A1E	Atom N455	512 KB	1 GB bundle	18/24-bit	By request	Yes	2	Yes	2	1	6	2	1	Full-size	Passive	-20 ~ 80° C
PCM-9363NZ21GS6A1E	Atom N455	512 KB	1 GB bundle	18/24-bit	By request	Yes	2	Yes	2	1	6	2	1	Full-size	Passive	-40 ~ 85° C

Note: Passive = fanless; Active = with fan

Packing List

Part No.	Description	Quantity
	PCM-9363 SBC	
	Startup Manual	
	Utility CD	
9689000002	mini Jumper pack	
1700008941	SATA Cable w/lock 30 cm	1
1703060191	PS/2 cable 19 cm	1
1701140201	COM2 IDE D-SUB 20 cm cable	1
1703100121	USB 2 x 5P-2.0 12 cm W/BKT cable	2
1700018839	Audio Cable 20 cm	1
1700260250	LPT IDE 26P D-SUB 25 cm cable	1
1700018785	Internal SATA power cable 35cm	1
1700100250	COM3 Cable IDE#2 10P-2.0/D-SUB 9P (M) 25 cm	1
1960050034N001	CPU N455 heatsink (75 x 62 x 19.9 mm) for PCM-9363N series	1
1960050035N001	CPU D525 cooler (75 x 62 x 24.4 mm) for PCM-9363D	1
1960024933S00B	ICH8M Heatsink for PCM-9363 series (38.1 x 33.6 x 7.5 mm)	1
1960050034N011	PCM-9363NZ/NZ2 CPU N455 heatsink (85 x 62 x 24.9 mm)	1

Rear I/O View



PCM-9363N-S6A1E
PCM-9363D-S8A1E
PCM-9363NZ-1GS6A1E
PCM-9363NZ21GS6A1E

PCM-9363DH-S8A1E

Optional Accessories

Part No.	Description
1960047470N001	Heat spreader (97 x 75 x 18.5 mm)
1655003865	Right angle power connector 2*2P
ACK-A001E	Embedded Chassis for PCM-9362(12V)/9363 series (System dimensions with mounting bracket: 230 x 65 x 145 mm)

Embedded OS/API

Embedded OS/API	Part No.	Description
Win XPE	2070010314	XPE WES2009 PCM-9363 V4.0 24MUI
	2070010313	XPE WES2009 PCM-9363 V4.0 ENG
WinCE	2070010331	CE 6.0 R3 Pro PCM-9363 V6.0.0 ENG (3COM)
WES7	2070009835	Image WES7E Intel Lunar V5.0 ENG
QNX		6.5
Vxwork		6.8
Linux		Ubuntu 10.04
Software API		