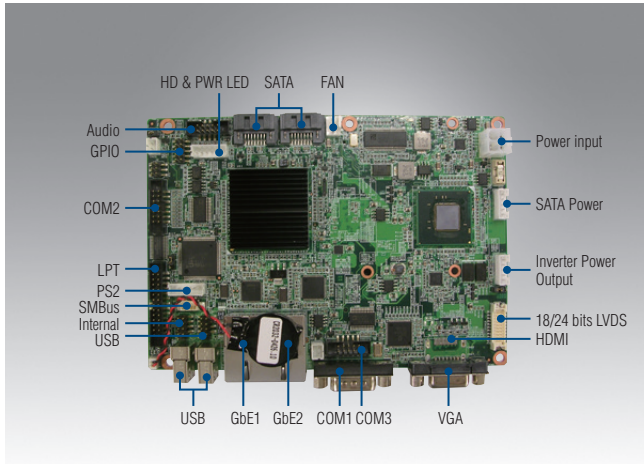


# PCM-9363

Intel® Atom™ N455/D525 3.5" SBC, DDR3, 18/24-bit LVDS, VGA/HDMI, 2 GbE, Mini PCIe, CF



## 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:



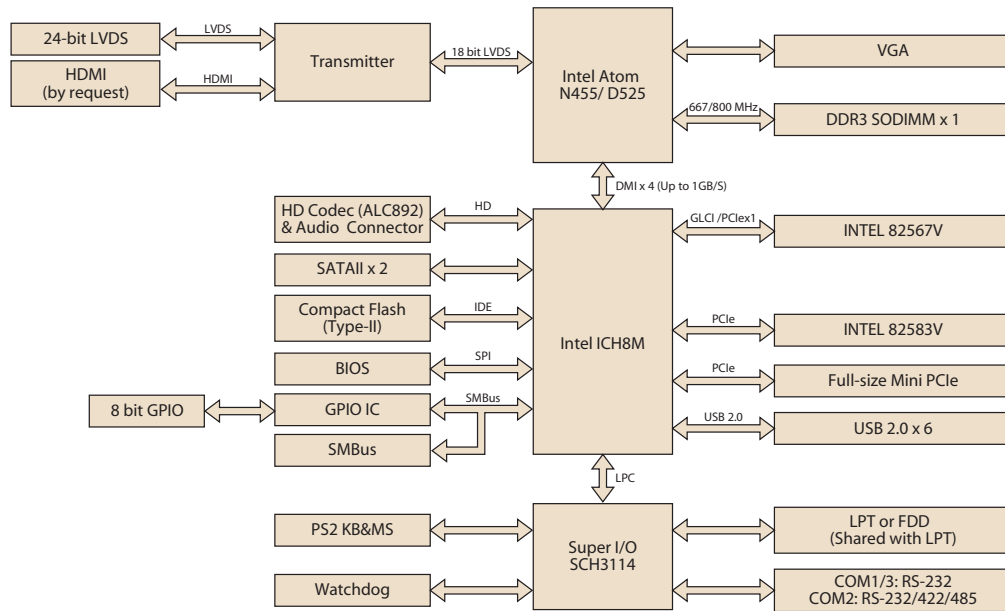
### Utilities:



## Specifications

Processor System	CPU	Intel Atom N455 Single Core 1.66 GHz Processor Intel Atom D525 Dual Core 1.8 GHz Processor
	Frequency	1.66GHz for N455, 1.8GHz for D525
	L2 Cache	512KB for N455, 1MB for D525
	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 Chronlet Utility in Windows XP/XP Embedded) Supports Hot Plug Detection (HPD) for HDMI
Ethernet	Dual Display	VGA+LVDS
	Speed	10/100/1000 Mbps (Supports Wake on LAN)
	Controller	GbE1 Intel 82567V, GbE2 Intel 82583V
Audio	Connector	RJ-45 on GbE1, GbE2
	Chipset	Realtek ALC892 High Definition Audio (HD), Line-in, Line out, Mic-in
WatchDog Timer		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 (Support by request)
	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
Environment	Battery	Lithium 3 V/210 mA
	Operational	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing)
Physical Characteristics	Non-Operational	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
	Dimensions (L x W)	146 x 102 mm (5.7" x 4")
	Weight	0.64 kg (1.41 lb), weight of total package
	Total Height	30.5mm for PCM-9363N 34.5mm for PCM-9363D

## Block Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Memory	LVDS	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	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-9363NZ-1GS6A1E	Atom N455	512 KB	1 GB bundle	18/24-bit	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	Yes	2	Yes	2	1	6	2	1	Full-size	Passive	-40 ~ 85° C

Note: Passive = fanless; Active = with fan HDMI function supported by request

## 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

HDMI supported by request

## 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)
	2070011150	Image CE 7.0 Pro PCM-9363 V1.0 ENG
WES7	2070009835	Image WES7E Intel Lunar V5.0 ENG
QNX		6.5
Vxwork		6.8
Linux		Ubuntu 10.04.1
Software API		SUSI V3.0

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