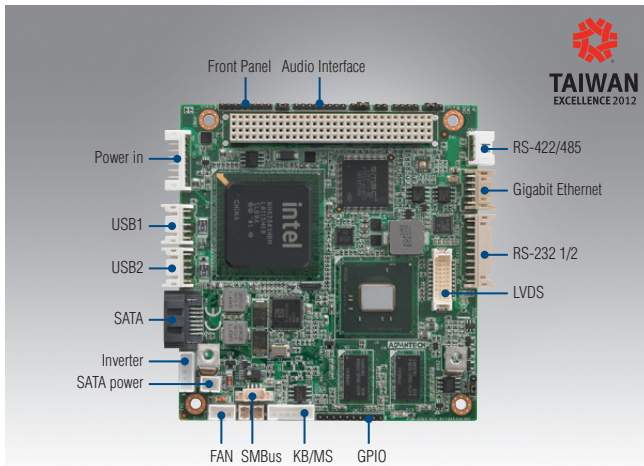


# PCM-3363

**Intel® Atom™ N455/D525 PCI-104 SBC, VGA, LVDS, Ethernet, USB, COM, SATA, Onboard Memory**



## Features

- Intel® Atom N455 1.66 GHz Single Core/D525 Dual Core 1.8 GHz Processor
- Supports extended temperature -40 ~ 85° C
- 24-bit LVDS support and onboard 1 GB DDR3 800 MHz memory
- HALT tested and 100% locked connector
- Supports Lite iManager, SUSIAccess and Embedded Software APIs

### Software APIs:



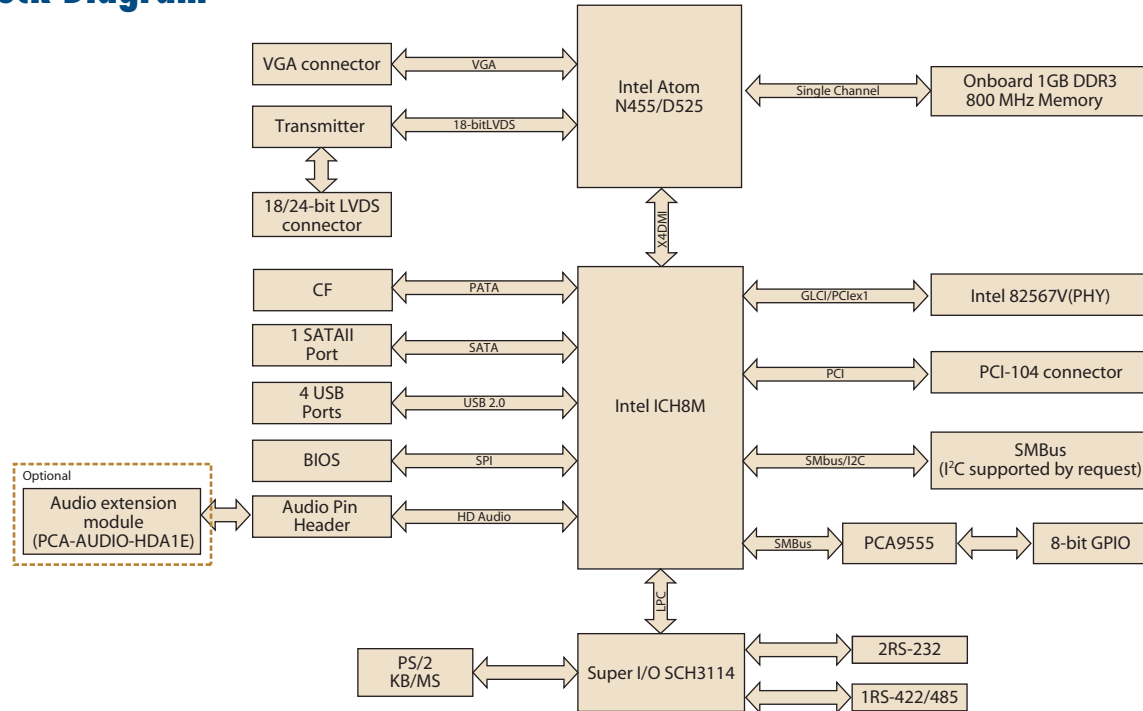
### Utilities:



## Specifications

Processor System	CPU	Intel Atom N455 Single Core 1.66 GHz Intel Atom D525 Dual Core 1.8 GHz	
	Frequency	1.66 GHz/1.8 GHz	
	L2 Cache	512 KB/1 MB	
	System Chipset	Intel Atom N455/D525 + ICH8M	
	BIOS	AMI 16 Mbit	
Memory	Technology	DDR3 800 MHz	
	Max. Capacity	1 GB	
	On board memory	1GB DDR3 800 MHz Memory	
Display	Chipset	Intel Atom N455/D525	
	VRAM	Shared system memory up to 224 MB	
	Graphics Engine	Intel Atom N455 Single Core:	Gen 3.5 graphic core, DX9 compliant, MPEG2 Hardware Acceleration, 200 MHz
		Intel Atom D525 Dual Core:	Gen 3.5 graphic core, DX9 compliant, MPEG2 Hardware Acceleration, 400 MHz
	LVDS	Single channel 18/24-bit single channel LVDS up to 1366 x 768 (WXGA)	
	VGA	Intel Atom N455 Single Core up to 1400 x 1050 (SXGA) Intel Atom D525 Dual Core up to 2048 x 1536	
Dual Display	VGA+LVDS		
Ethernet	Interface	10/100/1000 Mbps	
	Controller	ICH8M + Intel 82567V (PHY), support Wake-on-LAN	
	Connector	Locked Box Header	
WatchDog Timer		Output System Reset, Programmable counter from 1 ~ 255 minutes/ seconds	
Storage	CompactFlash	1 CompactFlash socket (Type I/II)	
	SATA	SATAII, up to 3.0 GB/s (300 MB/s)	
Internal I/O	USB	4 x USB 2.0	
	Serial	2 RS-232 from COM1/2, 1 RS-422/485 from COM3 (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV)	
	SMBus	1 (configurable to I2C by customer's request)	
	Keyboard/Mouse	1	
	GPIO	8-bit general purpose input/output	
	Audio	Intel High Definition audio interface (requires an audio extension module P/N: PCA-AUDIO-HDA1E)	
Expansion	PCI-104 Slot	1	
Power	Power Type	ATX/AT	
	Power Supply Voltage	5 V ± 5% only to boot up (12 V is optional for LCD inverter and add on card)	
	Power Management	ACPI	
	Power Consumption (Typical)	N455: 1.404A @ +5 V (7.02 Watts); D525: 1.85 A @ +5 V (9.25 Watts)	
	Power Consumption (Max, test in HCT)	N455: 2.365A @ +5 V (11.825 Watts); D525: 2.695 A @ +5 V (13.475 Watts)	
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)	96 x 90 mm (3.8" x 3.5")	
	Weight	0.664 kg (1.46 lb) (with heat-sink)	
	Height	Top side: 14.4 mm, 19.4 mm (D, Z & Z2); Bottom side: 10.6 mm	

## Block Diagram



## Ordering Information

Part Number	CPU	L2 Cache	Memory	VGA	LVDS	GbE	USB 2.0	RS-232	RS-485	Expansion	Thermal Solution	Operating Temp
PCM-3363N-1GS6A1E	Atom N455 (1.66 GHz)	512 KB	Onboard 1 GB DDR3	1	18/24-bit	1	4	2	1	PCI-104	Passive	0 ~ 60° C
PCM-3363D-1GS8A1E	Atom D525 (1.8 GHz)	1 MB	Onboard 1 GB DDR3	1	18/24-bit	1	4	2	1	PCI-104	Active	0 ~ 60° C
PCM-3363Z-1GS6A1E	Atom N455 (1.66 GHz)	512 KB	Onboard 1 GB DDR3	1	18/24-bit	1	4	2	1	PCI-104	Passive	-20 ~ 80° C
PCM-3363Z2-1GS6A1E	Atom N455 (1.66 GHz)	512 KB	Onboard 1 GB DDR3	1	18/24-bit	1	4	2	1	PCI-104	Passive	-40 ~ 85° C

Note: Passive = fanless; Active = with fan

## Packing List

Part No.	Description	Quantity
	PCM-3363 SBC	
	Startup Manual	
	Utility CD	
1700000898	VGA cable D-SUB 15P(F)/12P-1.25 MM 15 cm	1
1700003491	ATX/AT power cable 1*8P-2.0/B4P-5.08*2 15 cm	1
1700060202	Cable 6P-6P-6P PS/2 KB & Mouse 20cm	1
1703040157	RS-422/485 W/D-SUB COM 4P 15 cm	1
1703060053	PS2 cable 6P (MINI-DIN)-6P (Wafer 2.0 mm) 6 cm	1
1700019000	USB cable 2-port 2.0 mm pitch w/ bracket 26 cm (w/ locked)	1
1700008941	SATA data cable 7p 32 cm (w/ locked)	1
1703150102	SATA power cable B4P-5.08/SATA 15P 10 cm	1
1700018999	RS-232 x2 ports 2.0 mm 22 cm (w/ locked)	1
1700019001	LAN cable RJ-45/2*5P-2.0 15 cm (w/ locked)	1
9660104000	PC/104 screw and copper post package	1
1960051405N001	Heatsink with FAN for PCM-3363D only (79.66 x 77.97 x 17.22 mm)	1
1960051403N001	Heatsink for PCM-3363N only (79.66 x 77.97 x 12.22 mm)	1
1960051404N001	Heatsink for PCM-3363Z&Z2 series only (79.66 x 77.97 x 17.22 mm)	1

## Optional Accessories

Part No.	Description
1960051701N001	Heat spreader (79.66 x 77.98 x 10.32 mm) for PCM-3363
1653130421	PCI-104 connector 120-pin (Long pin)
PCA-AUDIO-HDA1E	Audio Extension module with bracket
1700018427	Audio cable connecting PCM-3363 and PCA-AUDIO-HDA1E
1700018259	SATA power cable for onboard connector (5V only)

## Embedded OS/API

Embedded OS/API	Part No.	Description
WES7	2070011094	WES7E PCM-3363 V5.1 ENG
WinCE	2070010619	WinCE 6.0 Pro PCM-3363 V1.2 ENG
	2070011056	WinCE 7.0 Pro PCM-3363 V1.0 ENG
	2070010324	XPE WES2009 PCM-3363 V4.0 ENG
Win XPE	2070010323	XPE WES2009 PCM-3363 V4.0 MUI24
		6.5
Linux		Ubuntu 10.04.1
VxWorks		6.8
Software API		SUSI V3.0