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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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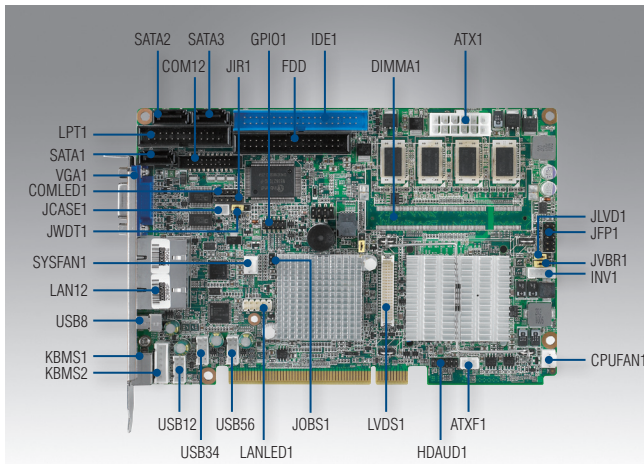
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PCI-7031

Intel® Atom™ N450/D510 PCI Half-size SBC with Onboard DDR2/VGA/LVDS/Dual GbE/SATA/COM



Features

- Ultra low power, fanless Intel® Atom™ processor N450 CPU and 1 GB onboard DDR2 667 memory (Only for N SKU)
- Dual Core™ high performance D510 CPU and maximum 2 GB DDR2 667 memory (For both D & DF SKUs)
- VGA/LVDS dual video outputs
- Optional module for 4 x RS-485 w/auto-flow control
- Supports embedded software APIs and Utilities

Software APIs:



Utilities:



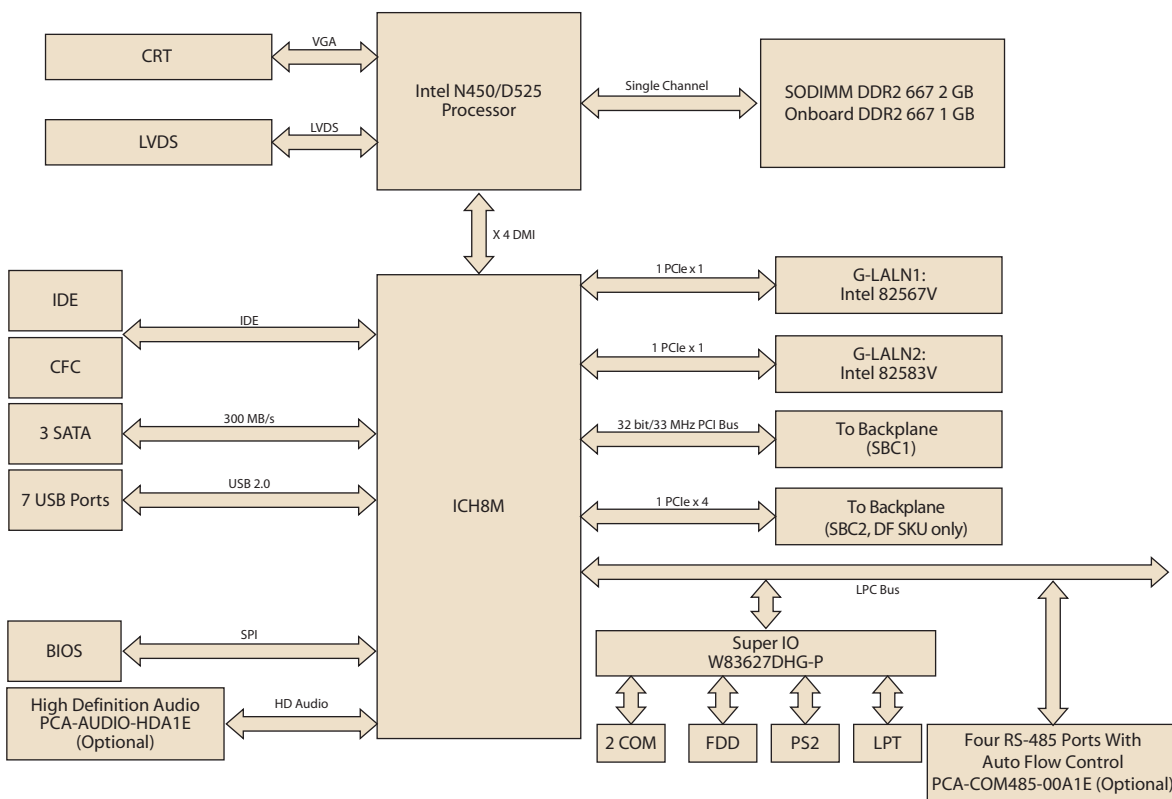
Note: eSOS needs ODM BIOS available by request



Specifications

Processor System	CPU	Intel Atom N450	Intel Atom D510
	Speed	1.66 GHz	1.66 GHz
	L2 Cache	512 KB	1 MB
	Chipset	ICH8M	
	BIOS	AMI 16Mb SPI Flash	
Bus	PCI-Express	-	
	PCI	Four 32 bit/33 MHz PCI Masters to Backplane	
Memory	Technology	Single channel DDR2 667 MHz	
	Max. Cap.	1 GB onboard for N SKU; max 2 GB SODIMM for D SKU	
	Socket	No socket for N SKU; 200-pin SODIMM x 1 for D SKU	
Graphics	Onboard VRAM	Embedded Gen3.5+ GFX Core technology, DirectX 9/Pixel Shader 2.0 compliant	
	Video Interface	15-pin VGA D-sub connector x1/Onboard LVDS pin header x 1 (supports single channel 18-bit LVDS)	
	Video Output	VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz for N SKU, up to 2048 x 1536 @ 60 Hz for D & DF SKU LVDS: Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800 for N, D, & DF SKUs Dual Display: VGA + LVDS, supports extended mode and clone mode for N, D, & DF SKUs	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	LAN1: Intel 82567V LAN2: Intel 82583V	
	Connector	RJ-45 with LED Connector x 2	
SATA	Max. Transfer Rate	300 MB/s	
EIDE	Channel	1 (supports up to 2 IDE devices)	
	Mode	ATA 100/66/33	
I/O Interface	USB 2.0	7 ports on the SHB	
	Serial	Two RS-232 onboard pin-headers, plus four RS-485 ports with auto-flow control by module (Optional, Advantech P/N: PCA-COM485-00A1E)	
	Parallel	1 (EPP/ECP)	
	FDD	1	
	PS/2	1 (for mouse and keyboard, an Y cable is included in the package)	
Watchdog Timer	Output	System reset	
	Interval	Programmable, 1~255 sec	
Miscellaneous	Audio Output	Intel High Definition audio interface (requires a audio extension module, P/N: PCA-AUDIO-HDA1E)	
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F) (operating humidity: 40° C @ 85% RH Non-Condensing)	Non-Operating -40 ~ 85° C and 60° C @ 95% RH Non-Condensing
	Dimensions	185 mm (L) x 122 mm (W) (7.3" x 4.8")	

Block Diagram



Ordering Information

Model Name	CPU	Memory	Fanless	VGA	LVDS	SATA	USB	COM	CF
PCI-7031D-S6A1E	Atom™ D510	One SODIMM Socket 2 GB DDR2 667 No Onboard RAM	No	1	1	3	7	2	1
PCI-7031DF-S6A1E	Atom D510	One SODIMM Socket 2GB DDR2 667 No Onboard RAM	Yes*	1	1	3	7	2	1
PCI-7031N-S6A1E	Atom™ N450	No SODIMM Socket Onboard 1 GB DDR2 667	Yes	1	1	3	7	2	1

*PCI-7031DF-S6A1E is only compatible with chassis: IPC-120 and backplane: PCI-7103P1V-01.

Optional Accessories

Part Number	Description
PCA-COM485-00A1E	Extension module for four RS-422/485 ports with auto-flow control function
PCA-AUDIO-HDA1E	Extension module for 7.1 channel High Definition audio

Bracket View



PCI-7031D-S6A1E
 PCI-7031N-S6A1E
 PCI-7031DF-S6A1E

Packing List

Part Number	Description	Quantity
960046526N001	CPU cooler for Atom™ D510 CPU (only available for D SKU)	x 1
1700003194	Serial ATA HDD data cable	x 1
1703150102	Serial ATA HDD power cable	x 1
1701260301	Printer (parallel) port cable kit	x 1
1700008762	Dual COM ports cable kit	x 1
1700002343	ATX feature cable	x 1
1700014398	4-port USB cable kit	x 1
1700060202	Y cable for PS/2 keyboard and PS/2 mouse	x 1
1700000265	AT/ATX PSU 20-Pin to 12-Pin Cable Kit	x 1
9689000068	Jumper pack	x 1
-	Warranty card	x 1
-	PCI-7031 startup manual	x 1
-	CD with driver utility and manual (in PDF format)	x 1