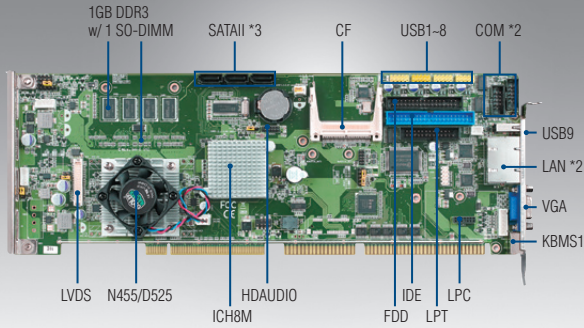


# PCA-6013

## Intel® Atom™ N455/D525 SBC with VGA/Dual GbE LAN

**NEW**



### Specifications

Processor System	CPU	Intel Atom N455	Intel Atom D525				
	Speed	1.66 GHz	1.8 GHz				
	L2 Cache	512 KB	1 MB				
	Chipset	Intel ICH8M					
	BIOS	AMI 16Mb SPI Flash					
Bus	PCI	32-bit/33 MHz PCI					
	ISA	HISA (ISA High Drive)					
Memory	Technology	Single channel DDR3 800 MHz DIMMs					
	Max. Cap.	2 GB	3 GB				
	Layout	1G on-board and 204 pin SODIMM x1					
Graphics	Controller	Embedded Gen3.5+ GFX Core technology, Direct X 9/Pixel Shader 2.0 compliant					
	VRAM	Shared with system memory up to 224 MB					
	Video Interface	15-pin VGA D-sub connector x1/LVDS pin header x 1 (G2 SKU only, supports single channel 18-bit LVDS)					
Video Output	VGA:	Supports up to SXGA 1400 x 1050 @ 60 Hz for Intel Atom N455 VG SKU, up to 2048 x 1536 @ 60 Hz for Atom D525 G2 SKU					
	LVDS:	Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800 (G2 SKU only)					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN1: Intel 82567V, LAN2: Intel 82583V					
	Connector	RJ45 with LED Connector x2 (G2 SKU), x1 (VG SKU)					
SATA 2	Max. Transfer Rate	300 MB/s					
EIDE	Mode	ATA 100/66/33					
	Channel	1 (Supports up to 2 IDE devices; Master device is alternative for CF socket)					
I/O Interface	USB 2.0	8 ports by pin header (VG SKU); 8 ports by pin header and 1 port on bracket I/O (G2 SKU)					
	Serial	2 RS-232 onboard pin-headers, plus four ports of RS-485 with auto-flow control by module (optional, Advantech P/N: PCA-COM485-00A1E)					
	Parallel	1 (EPP/ECP)					
	GPIO	1 (8-bit)					
	FDD	1					
	PS/2	1 (for mouse and keyboard, 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 an audio extension module, P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Configuration	Intel Atom D525 CPU 1.8 GHz + DDR3 1333 2G x2 SODIMM; Storage: One SATA HDD					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	0.44 A	3 A	0 A	0.15 A	0 A	0 A
	Configuration	Atom N455 CPU 1.66 GHz + DDR3 1333 1G x2 SODIMM; Storage: One SATA HDD					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	0.16 A	2.1 A	0 A	0.13 A	0 A	0 A
Environment	Temperature	Operating	Non-Operating				
		0 - 60° C (32 - 140° F)	-40 ~ 85° C and 60° C @ 95% RH Non-Condensing				
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

### Features

- Ultra low power, fanless N455 CPU and maximum 2 GB DDR3 800 memory (Only for N SKU)
- Dual core high performance Intel® Atom™ D525 processor and maximum 3 GB DDR3 800 memory (Only for D SKU)
- Memory anti-vibration through 1GB on board memory and SO-DIMM mounting holes
- IE61000-4-5 LV.3 anti-surge certified rear I/O: LAN, COM ports and optional module COM-485SP w/ 4x RS-485

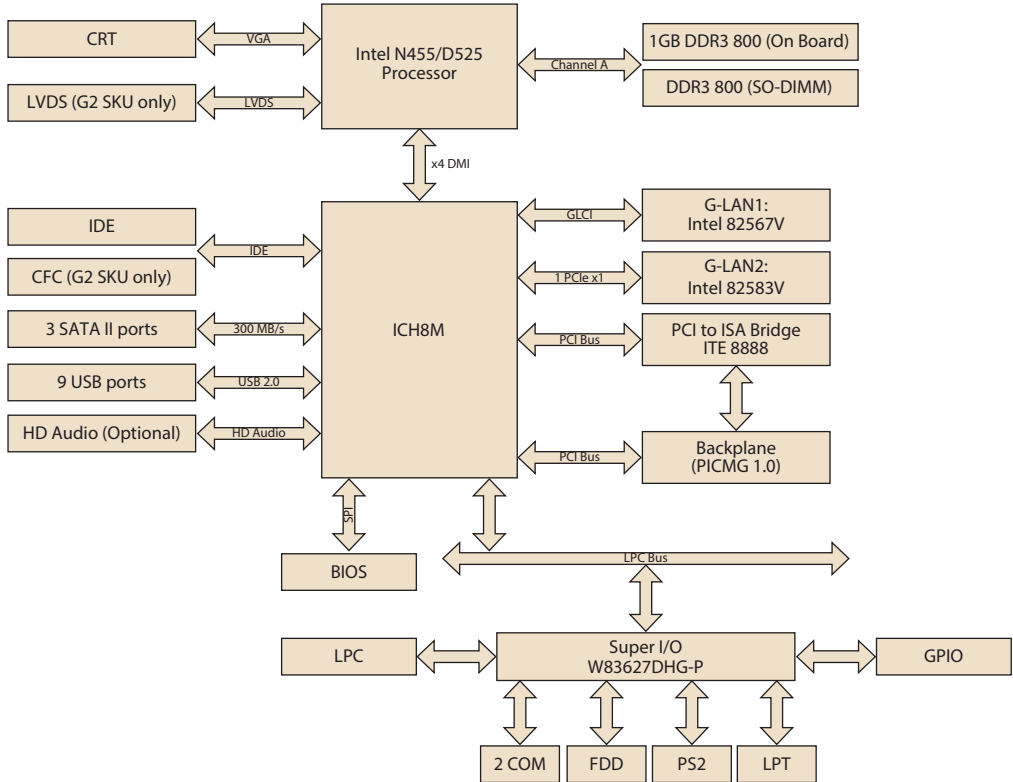
#### Software APIs:



#### Utilities:



### Block Diagram



### Ordering Information

P/N	CPU	Fan-Less	RAM	LAN	VGA	LVDS	FDD	SATA	USB	CF
PCA-6013VG-00A1E	Intel® Atom™ N455	Yes	1G onboard + 1 SO-DIMM to 2G	Single GbE LAN	Yes	-	1	3	8	-
PCA-6013G2-00A1E	Intel® Atom™ D525	No	1G onboard + 1 SO-DIMM to 3G	Dual GbE LAN	Yes	Yes	1	3	9	1

### Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module
PCA-COM485-00A1E	4 x RS-422/RS-485 COM module
1701090401	Single COM cable kit
1701092300	Dual COM port cable kit

### Packing List

Part Number	Description	Quantity
1960046526N001	CPU Cooler for Atom D525CPU (Only for G2 SKU)	x 1
1701400452	IDE HDD cable	x 1
1700008461-11	USB cable with 4 ports	x 1
1700022749-11	Serial ATA HDD power cable	x 1
1700003194	Serial ATA HDD data cable	x 1
1700060202	Y-cable for PS/2 mouse & keyboard	x 1
1701260305	Printer + COM cable	x 1
9689000068	Jumper pack	x 1
2190000902	Warranty card	x 1
2006601311	Startup manual	x 1
2066P60100	Utility CD	x 1

### Bracket View



PCA-6013VG-00A1E



PCA-6013G2-00A1E