



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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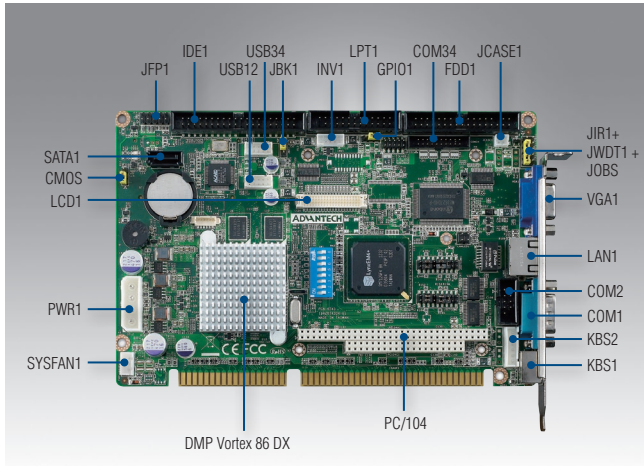
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# PCA-6743

**DM&P Vortex86DX ISA Half-size SBC with  
VGA/ TTL or LVDS/ LAN/ USB/ PC/104/ CFC/ COM**



## Features

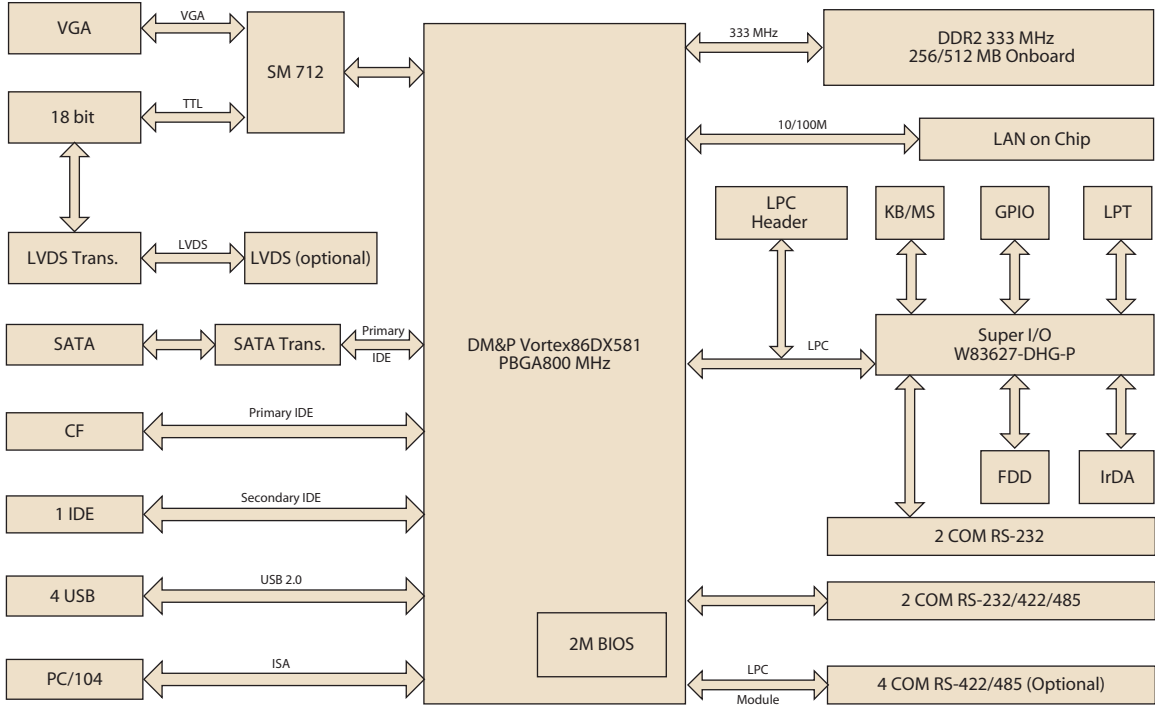
- Ultra low power, fanless DM&P Vortex86DX processor and 512/256 MB onboard DDR2 memory
- VGA+LCD dual video outputs
- FDD/ PC/104/ COM supported
- Optional module for 4 COM485 w/auto-flow control



## Specifications

Processor System	CPU	DM&P Vortex86DX	
	Max. Speed	800 MHz	
	L1 Cache	16 KB I/D-Cache	
	L2 Cache	256 KB	
	Chipset	DM&P Vortex86DX	
Bus	BIOS	Award integrated in DM&P Vortex86DX	
	ISA	Full 16-bit ISA Bus signal	
Memory	Technology	Default onboard DDR2 256MB (For VE SKU) Default onboard DDR2 512MB (For F SKU)	
	Socket	-	
Graphics	Controller	Chipset integrated VGA controller VGA mode: SM712 graphics chip supports 1024 x 768 @ 24-bit true color LCD mode: SMI SM712 2D graphics chip supports 1024 x 768 @ 18-bit TFT	
	VRAM	Shared 4 MB	
	LVDS	18 bit LVDS (optional)	
	TTL	Up to 24-bit TTL for TFT LCD	
	Dual Display	Supports VGA+LCD simultaneous display	
Ethernet	Interface	10/100 Mbps	
	Controller	LAN on Vortex86DX	
	Connector	RJ-45 x 1	
EIDE	Mode	UDMA 100	
	Channel	1 (2 IDE devices from secondary IDE)	
SATA (150 MB/s)	Port	1 (F SKU)	
I/O Interface	USB	4 (USB 2.0 ports)	
	Serial	F SKU: 2 RS-232/422/485 (1 Real I/O and 1 Pin header) + 2 RS-232 (with Pin header) VE SKU: 2 RS-232 (1 Real I/O and 1 Pin header) Optional: PCA-COM485; Add 4 RS-422/485 with Auto-Flow Control (Need to check if IRQ is available or not)	
	Parallel	1 (EPP/ECP/SPP)	
	FDD	1	
	GPIO	8-bit 4 in/4 out	
	PS/2	1 (6-pin DIN socket on bracket for PS/2 keyboard and mouse, 6-pin wafer box connector for keyboard only)	
	Watchdog Timer	Output	System reset/IRQ11
Miscellaneous	Interval	Programmable, 1~255 sec/min	
	Audio Output	-	
Power Requirement	Solid State Disk	Compact Flash socket (Type I/II) from primary master	
	Voltage	+12 V	+5 V
	Current	0.04 A	1.44 A
Environment	Operating	Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F) (operating humidity: 40° C @ 85% RH Non-Condensing) -40° C ~ 85° C and 60° C @ 95% RH Non-Condensing	
Physical	Dimensions	185 mm (L) x 122 mm (W) (7.3" x 4.8")	

### Block Diagram



### Ordering Information

P/N	VGA	TTL	LVDS	SATA	COM	PC104	LPT	FDD	Onboard RAM
PCA-6743VE-Q0A2E	1	1	-	-	2 RS-232	-	1	1	256 MB
PCA-6743F-Q0A2E	1	1	-	1	2 RS-232 2 RS-232/422/485	1	1	1	512 MB
PCA-6743F-L0A2E	1	-	1	1	2 RS-232 2 RS-232/422/485	1	1	1	512 MB

### Optional Accessories

Part Number	Description
PCA-COM485-00A1E	4 x RS-422/485 COM module

\* Please check the IRQ resource availability before add on the module.

### Bracket View



PCA-6743VE-Q0A2E  
 PCA-6743F-Q0A2E  
 PCA-6743F-L0A2E

### Packing List

Part Number	Description	Quantity
1700008762	Dual-COM port cable kit for COM3-4 (2.00 mm) (for F SKU)	x 1
1700014398-11	4-port USB cable kit (2.0 mm pitch)	x 1
1700060202	Y cable for PS/2 keyboard, PS/2 mouse	x 1
1701260305	COM2 (2.54 mm) +LPT (2.54 mm) cable (for F SKU)	x 1
1700003194	SATA HDD data cable	x 1
1700022749-11	SATA HDD power cable	x 1