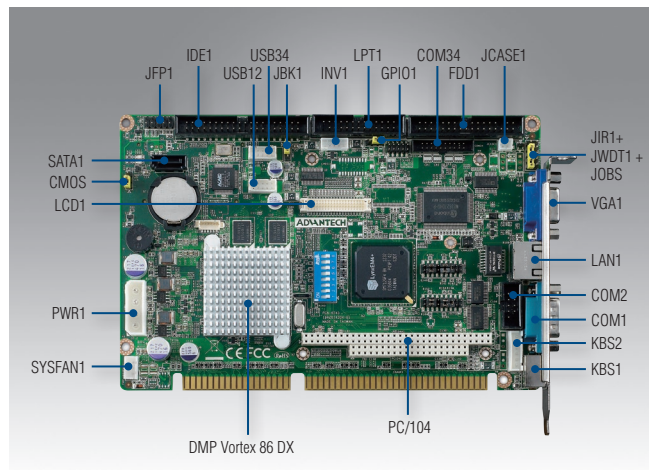


# PCA-6743

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



## Features

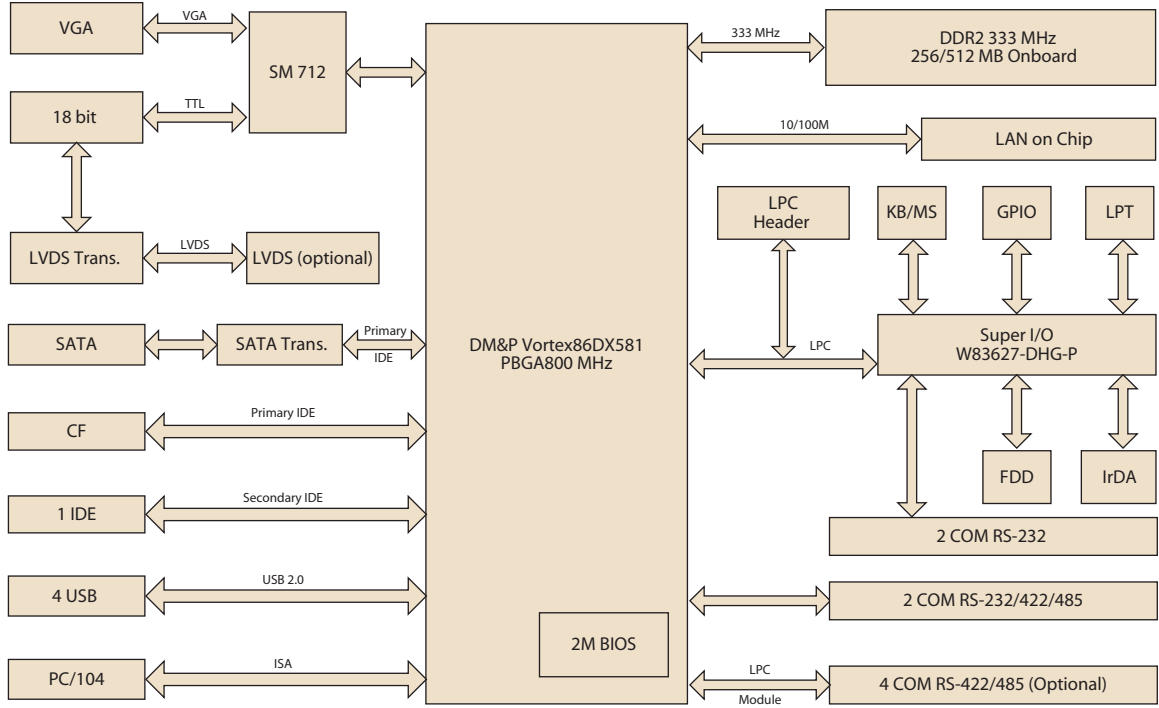
- Ultra low power, fanless DM&P Vortex86DX processor and 512/256 MB onboard DDR2 memory
- VGA+LCD dual video outputs
- FDD/ PC/104/ COM supported
- Optional module for 4 COM485 w/auto-flow control



## 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