PCOM-C640

PCOM-C640 is NANO-ITX carrier board with triple display, Gigabit Ethernet, Audio, USB 3.0, SATA. It's a powerful carrier which is suitable for system.

FEATURES

- COM Express® carrier board is compatible with the Portwell Type VI COM Express® modules
- NANO-ITX form factor can meet most standard mounting spaces and provide more expansions and displays.
- Support Rear I/O, DP, RJ45, USB 2.0 & 3.0

Portwell PCOM-C640 is a NANO-ITX form factor carrier with COM Express® Type VI row connectors. It's suitable for evaluation testing of Portwell's Type VI COM Express® modules for 1U Server system. We also provide carrier board design guide for your own carrier board development as a reference. With PCOM-C640 carrier board, Portwell now has various carriers in different form factors to help customers on developing new platform for both board and system perspectives. Customers can easily begin to develop on new application with Portwell's COM Express® Type VI module.

General	
Product	PCOM-C640
Form Factor	NANO-ITX (120 x 120mm)
Processor	Depends on Module
Core	
Freq.	
Turbo	
Cache	
Processor Graphics	
Graphics Base Frequency	
Graphics Max Dynamic Frequency	
HW Encoding	
HW Decoding	
HW Acceleration	
Processor TDP	
BIOS	
ECC Memory Supported	
Memory	

I/O Interface			
SATA	2x SATA III		
USB	1 x USB2.0 2 x USB3.0		
Ethernet	2 x GbE		
Serial I/O	GPIO	8 GPIO	
	I²C	base on module design	
	SMBus	base on module design	
	UART	2x UART	
PEG	N/A		
PCI Express	1x PCIe x1		
Display	CRT	CRT	2560 x 1600
	LVDS	LVDS	1920x1200
	HDMI	DP	3840 x 2160
		HDMI	N/A
Security	N/A		

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MECHANICAL & ENVIRONMENT

Dimension	120 x 120mm
Power DC IN	12V DC IN
Storage Temperature	−20°C to 80°C
Operation Temperature	0°C to 55°C
Certification	Contact us
MTBF	Over 100,000 hours at 40° C
Vibration	N/A
OS	Depend on Module

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-C640	AB1-3D18	Available

BLOCK DIAGRAM

PCOM-C640

Onboard Connector

Front I/O LED | DC 12V (4 pin) | DC-Jack | Rear I/O Connector

Power Button

Row AB

Row CD

VGA → VGA

LVDS → LVDS(24bit) Dual Channel

DP → DP

LPC → F81216DG ↔ COM x1 (RS232/422/485)

F81216DG → LPC Header

PCIe x1 → I210IT ↔ RJ45 Connector

GBE → RJ45 Connector

HDA → ALC892 ↔ Line-out

ALC892 → Mic-In

USB 2.0 x2 → USB 3.0、2.0 x2 ← USB 3.0 x2

USB 2.0 → USB 2.0

USB 2.0 → USB2640I-HZH ↔ SD Sock

SATA 3.0 x2 → ALC892 ↔ SATA 3.0 x 2

ALC892 → mSATA x1 (Option)

GPIO x8 Header