# PCOM-C700G

ATX Form Factor Evaluation Carrier Board for Type 7 COM Express® Rev3.0 module with 4x 10GbE Support





### **FEATURES**

- 4x 10GbE Support
- Consoles Redirection Support
- BMC AST2500 Support

Portwell PCOM-C700G is designed with ATX form factor with COM Express® Type VII row connectors; it's suitable for evaluation testing of Portwell's Type VII COM Express® modules with 4x USB 3.0, 28x PCIe lanes, 4x 10 Gigabit Ethernet, and BMC AST2500 support. Portwell is able to provide carrier board design guide for customer to design their carrier board as a reference. This can shorten customer's carrier board developing time and make the development quickly and easily. The PCOM-C700G provides COM Express® Type VII support in addition to suit wide range of device connectivity for prototype and flexibility.

General			
Product	PCOM-C700G		
Form Factor	Type 7, ATX (305 × 244 mm)		
Processor			
Core			
Freq.			
Turbo			
Cache			
Processor Graphics	Depends on Module		
Graphics Base Frequency			
Graphics Max Dynamic Frequency			
HW Encoding			
HW Decoding			
HW Acceleration			
Processor TDP			
BIOS			
ECC Memory Supported			
Memory			

I/O Interface			
SATA	2 x SATA III		
USB	4 x USB3.0 (Depend on Module)		
Ethernet	4x 10GbE 1x Gbe		
	GPIO	8 GPIO	
Serial I/O	I <sup>2</sup> C	Base on module design	
Serial I/O	SMBus	Base on module design	
	UART	2 x UART	
PEG	1x PCIe x16		
PCI Express	1x PCle x4 8x PCle x1		
Display	VGA	2560 x 1536 @ 24bpp	
Security	N/A		

## PCOM-C700G

#### **MECHANICAL & ENVIRONMENT** Dimension 305x244mm Power DC IN ATX Storage -40°C to 80°C Temperature Operating Temperature -40°C to 80°C Certification Contact us MTBF Over 100,000 hours at 40° C Vibration N/A os Depends on Module

#### **ORDERING GUIDE** Product Ordering P/N Status PCOM-C700.Support TYPE VII. ATX Form Factor.COM Express® AB1-3F19Z available Carrier Board

**BLOCK DIAGRAM** 

PCOM-C700G **COM Express Type 7 ATX Form** PWR BTN -40° C ~ +80° C ZR0 **Carrier Board** Factor ATX PSU Connecto Row CD (J34) Row AB SATA Powe (J36) SATA #0 PCI Express x16 (J16) PCIe #16~31 SATA #1 PCIe x1 (J7) PCIe #0 PCle x1 (J13) PCIe #6 BMC JTAG test header (JP6) PCle x1 (J8) Header & Jumpers PCle #1 PCle x1 (J14) PCIe #7 PCle x1 (J9) PCIe #2 BMC UART Debug header (JP7) RTC clear CMOS PCle x1 (J10) PCle #3 ATX/AT Mode header (JP8) BMC Debug Header (J20) PCle x1 (J11) Front panel header (JP11) PCIe #5 PCle x1 (J12) BMC Post code Header (J22) BIOS\_DISABLE setting (JP17, JP18) PCI Express x4 (J15) PCIe #8~11 BMC SPI program wafer connector (J23) GPIO Header (CN1) SER#0,1 Header (CN2) USB 2.0 Header (J26) GPIO / SER#0 / SER#1 / I2C / SMBus BMC SPI Flash header (J24) PCle #13 Power control header (J28) PCle #14 SPI BIOS Socket (U3) PCle #15 VCC\_RTC PORT 80 88 SPI Flash Sockets (U37,U38) USB 3.0 #0 1 USB 3.0 USB 3.0 #1 DRAM USB 3.0 AST2500 USB 3.0 #2 USB 3.0 PCle #12 USB 3.0 #3 USB 3.0 USB 2.0 #3 USB Hub 10G KR #0 10G KR CS4227 USB 2.0 #0 10G KR #1 10G KR #2 USB 2.0 #1 10G KR 10G KR #3 10G KR USB 2.0 #2 GBE0 USB (J18 Low) USB (J18 Up) USB (J17 Up) Rear I/O