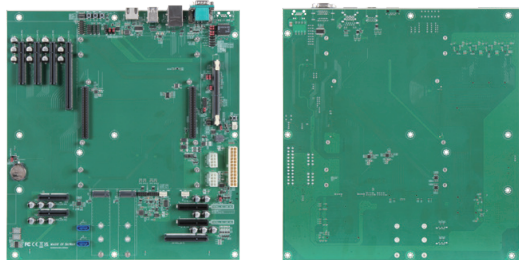


PCOM-C800

eATX (305x330mm) Form Factor Evaluation Carrier Board for COM-HPC Server Type Module



FEATURES

- COM-HPC carrier board support COM-HPC Server Type Size D/E modules
- Extended ATX (eATX) form factor provides comprehensive PCI Express (PCIe) expansions: PCIe 4.0 (one x16, four x8, two x 4), PCIe 3.0 (two x4 for M.2 NVMe)
- Support USB 3.2 Gen2, USB 2.0, SATA III, 2.5GbE and 1GbE RJ45, eight 10GbE/(25GbE) Ethernet KR signals from module
- Support OCP RunBMC slot and Portwell proprietary PHY cards for KR0 / KR1 extension
- Support industrial temperature range from -40°C to 85°C



The Portwell PCOM-C800 is a COM-HPC carrier board designed for Server Type Size D and E modules. It serves as a platform evaluation tool for embedded customers developing their own carrier boards and systems. This carrier board supports a wide range of the latest high-speed I/O (HSIO) interfaces, including PCIe 4.0/3.0, USB 3.2/2.0, and SATA, as well as legacy I/Os such as UART, GPIO, SMBus, I2C, and I2C Port 80 7-segment LEDs. Additionally, it includes an OCP RunBMC connector compliant with the Rev 1.4.1 specification for server management. It also supports an industrial temperature range from -40°C to 85°C.

General

Product	PCOM-C800
Form Factor	eATX size (305x330mm)
Supported Module	COM-HPC Server Type Size D and E
General Function	RTC battery BIOS SPI socket Power BTN / Reset BTN / Rapid shutdown BTN Two NVMe PCIe 3.0 x4, support 2242/2260/2280 OCP RunBMC slot based on Rev 1.4.1 Independent 1GbE RJ45 management port and VGA connector

I/O Interface

SATA	2 x SATA III
USB	4x USB 3.2 Gen2 Type A at rear I/O 4x USB 2.0 via pin header
Ethernet	1x GbE MDI from OCP RunBMC module with RJ45 connector at rear I/O 1x 2.5GbE MDI from module with RJ45 connector at rear I/O Eight 10G/(25G) Ethernet KR signals from module via two proprietary PCIe x4 slots
Serial I/O	GPIO
	I2C
	SMBus
	UART
PCI Express	One PCI Express 4.0 x16 connector (#16 ~ #31) Four PCI Express 4.0 x8 connector (#0 ~ #7, #32 ~ #55) Two PCI Express 4.0 x4 connector (#56 ~ #63) Two PCI Express 3.0 x4 for M.2 M-Key NVMe (#8 ~ #15)
Others	System fan connector x1, 4-pin PWM smart fan type Temperature and voltages monitoring

MECHANICAL & ENVIRONMENT

Dimension	305mm x 330mm
Storage Temperature	-40°C ~ 85°C
Operating Temperature	-40°C ~ 85°C
Storage Humidity	0% ~ 95%
Operation Humidity	0% ~ 95%

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-C800	AB1-3L52Z	In Development
PA-C3L-D27 PHY Card for PCOM-B800GT	AB9-3414Z	In Development
PA-C3L-P53 PHY Card for PCOM-B801GT	AB9-3438Z	In Development

BLOCK DIAGRAM

PCOM-C800

COM-HPC Server
Type D&E Carrier Board

eATX Board Size
305x330mm

-40 ~ +85C

