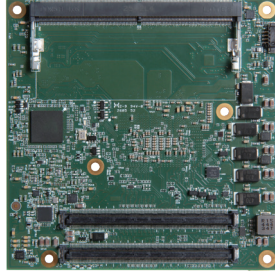
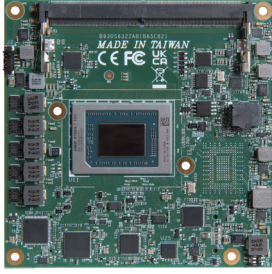


PCOM-B65C

COM Express Type 6 Compact Size module based on AMD Ryzen™ Embedded 8000 Series processors with DDR5 SO-DIMM, DDI, PCIe Gen 4, USB 3.2 Gen 2, discrete TPM 2.0, eDP, SATA, Out-of-Band (OOB)



FEATURES

- AMD Ryzen™ Embedded 8000 Series Processors
- Up to 8 Zen 4 cores and RDNA™ 3 graphics with up to 6 WGP (Work-group Processors)
- 2x DDR5-5600 ECC/non-ECC SO-DIMMs up to 96GB, 1x Gen4 x8, 1x Gen4 x2, and 6x Gen4 x1
- 4x USB3.2 Gen2, 2x SATA, 3x DDI, VGA, eDP/LVDS
- Supports optional Out-of-Band (OOB) management and onboard PCIe NVMe SSD

General

General				
Model	PCOM-B65C			
Form Factor	COM Express Type 6 Compact Size (95 mm x 95 mm)			
CPU	8845HS	8840U	8645HS	8640U
Core/Thread	8C/16T	8C/16T	6C/12T	6C/12T
Based Frequency	3.8	3.3	4.3	3.5
Turbo Frequency	5.1	5.1	5.0	4.9
Cache	8	8	6	6
TDP	45	28	45	28
Graphics EU	6 WGP	6 WGP	4 WGP	4 WGP
Graphics Max Freq.	2.7	2.7	2.6	2.6
Memory Type/Speed	2x DDR5 SO-DIMM up to 96GB 5600MT/s	2x DDR5 SO-DIMM up to 96GB 5600MT/s	2x DDR5 SO-DIMM up to 96GB 5600MT/s	2x DDR5 SO-DIMM up to 96GB 5600MT/s
ECC Memory Support	Support	Support	Support	Support
Temperature Range	0 ~ 60 °C (32.0 ~ 140.0 °F)	0 ~ 60 °C (32.0 ~ 140.0 °F)	0 ~ 60 °C (32.0 ~ 140.0 °F)	0 ~ 60 °C (32.0 ~ 140.0 °F)
BIOS	AMI uEFI BIOS			
Memory	2x DDR5 SO-DIMM, up to 96GB, 5600 MT/s			

I/O Interface

SATA	2x SATA III		
USB	8x USB 2.0 (Default) 4x USB3.2 Gen2 (Default)		
Ethernet	1x 1Gbe LAN (Default)		
PCIe	1x PCIe Gen4 x8 (Default) 1x PCIe Gen4 x2 (Default) 6x PCIe Gen4 x1 (Default)		
Storage	1x support NVMe (Share w/ SATA)		
Legacy I/O	8x GPIO (Default) 1x I ² C (Default) 1x SMBus (Default) 2x UART (Default)		
Security	TPM 2.0		
Display	Module display interface	Carrier output options	Resolution
	eDP / LVDS (default eDP)	eDP up to HBR3	3840 x 2160@120Hz
		LVDS (24bit, dual channel)	1920 x 1200@60Hz
	DDI 1/2/3	DP up to HBR3	3840 x 2160@120Hz
VGA	HDMI 2.1 VGA	3840 x 2160@120Hz 1920 x 1200@60Hz	

MECHANICAL & ENVIRONMENT

Dimension	95 x 95mm (3.74" x 3.74")
Operating Temperature	0 ~ 60 °C (32.0 ~ 140.0 °F)
Storage Temperature	-40 ~ 85 °C (-40.0 ~ 185.0 °F)
Certification	CE/FCC Class A
OS	Windows 11, Ubuntu 24.04
Portwell Special Feature	PET, RPET

Accessory	Ordering P/N	Status
Cooler (copper elastic pad)	In Process	Contact US
Heat Sink (copper elastic pad)	In Process	Contact US
Heat Spreader (aluminum)	In Process	Contact US
PCOM-C605R Mini-ITX Carrier	In Process	Contact US
PCOM-C60B ATX Evaluation Carrier	In Process	Contact US

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B65C-8845HS	In Process	Contact US
PCOM-B65C-8840U	In Process	Contact US
PCOM-B65C-8645HS	In Process	Contact US
PCOM-B65C-8640U	In Process	Contact US

BLOCK DIAGRAM

PCOM-B65C

