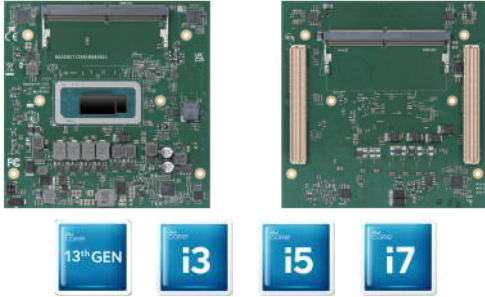


PCOM-B883VG2

COM-HPC® Client module Size B module with Intel® 12th / 13th Gen H/P/U Series Processor DDR5 SO-DIMM, DDI, PCIe Gen5, USB4, USB 3.2 Gen2, 2.5 Gigabit TSN Ethernet, discrete TPM 2.0, eDP, SATA III



FEATURES

- 12th / 13th Gen Intel® Core™, Series processors in Intel 7 lithography
- Up to 6x performance core + 8x efficient core, and up to 96x graphic execution units
- 2x DDR5-4800 non-ECC SO-DIMMs up to 2x 32GB, 1x PCIe Gen5 x8(H series), 2x Gen4 x4, and 8x PCIe Gen3 x1
- 2x USB4, 2x USB3.2 Gen2, 8x USB2.0, 2x SATAIII, 3x DDI, eDP



PCOM-B883VG2 is COM-HPC module based on Intel® 12th / 13th Gen H/P/U series platform. It is compatible with COM-HPC 1.15 standard. The platform adopt Intel 7 lithography and VNNI instruction set, offers advance computing power with 15~45W thermal and industrial use condition for wide range application. PCOM-B883VG2 supports up to PCIe Gen5 x8 on selected SKU, and additional 2x Gen4 x4 lanes for high speed PCIe storage, and 2x Non-ECC DDR5 SO-DIMM, which is suit for mission critical use conditions and AI edge computing with TSN. This module also provides 8x PCIe Gen3 x1 lanes, 2x USB4, 2x USB 3.2 Gen2, and 2x SATA III. The complete and flexible I/O capacity also mapped to wide range of industrial applications.

CPU and General

Product	PCOM-B883VG2									
Form Factor	COM-HPC Client size B module (120 X 120mm)									
SKU Type	H series			P series			U series			
	i7-13800HE	i5-13600HE	i3-13300HE	i7-1370PE	i5-1350PE	i3-1320PE	i7-1365UE	i5-1345UE	i3-1315UE	U300E
Cores P+E/ Threads	6P + 8E/20T	4P + 8E/16T	4P + 4E/12T	6P + 8E/16T	4P + 8E/16T	4P + 4E/12T	2P + 8E/12T	2P + 8E/12T	2P + 4E/8T	1P + 4E/5T
Frequency	2.5 GHz	2.7 GHz	2.1 GHz	1.9 GHz	1.8 GHz	1.7 GHz	1.7 GHz	1.4 GHz	1.2 GHz	1.1 GHz
Turbo Frequency	5.0 GHz	4.8 GHz	4.6 GHz	4.8 GHz	4.6 GHz	4.5 GHz	4.9 GHz	4.6 GHz	4.5 GHz	4.3 GHz
Intel® Smart Cache	24 MB	18 MB	12 MB	24 MB	12 MB	12 MB	12 MB	12 MB	10 MB	8 MB
Intel® Gfx EU	96 EU	80 EU	48 EU	96 EU	80 EU	48 EU	96 EU	80 EU	64 EU	48 EU
Graphics Max Freq.	1.40 GHz	1.40 GHz	1.30 GHz	1.40 GHz	1.40 GHz	1.35 GHz	1.30 GHz	1.25 GHz	1.20 GHz	1.10 GHz
Video Decode Boxes	2	2	1	2	2	1	2	2	1	1
TDP (Up/Nominal/ Down)	65W / 45 W / 35 W			35W / 28 W / 20W			28W / 15 W / 12W			
PCH	SoC									
ECC Memory Support	No									
BIOS	AMI BIOS									
Memory Type/ Speed	DDR5 SO-DIMM up to 64GB 4800MT/s									

I/O Interface

SATA	2x SATA III share with PCIe lane		
USB	2x USB 4 2x USB 3.2 Gen2 8x USB 2.0		
Ethernet	Intel® I226 series		
Serial I/O	GPIO	12 bit GPIO (default 6 input/6 output)	
	I ² C	Baud Rate : 400KHz	
	SMBus	Baud Rate : 100KHz	
	UART	TX/RX signal only	
PCI Express Gen5/4	1x Gen5 x8 (selected SKU), 2x Gen4 x4		
PCI Express Gen3	8x Gen 3.0 x1 (2 lanes share with SATA)		
Display	Default eDP	Options eDP up to HBR3	Resolution 7680 x 4320@60Hz
	DDI	DP up to HBR3	7680 x 4320@60Hz
		DP up to HBR3	7680 x 4320@60Hz
		DP up to HBR3	7680 x 4320@60Hz
Security	TPM 2.0		

PCOM-B883VG2

MECHANICAL & ENVIRONMENT

Dimension	120 x 120mm
Power DC IN	Normal: +12V DC AT/ATX mode
Storage Temperature	-40°C to 85°C
Operating Temperature	0°C to 60°C -40°C to 85°C (industrial SKU)
Certification	Contact us
MTBF	TBD
Vibration	TBD
OS	Windows 10/11 Ubuntu

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B883VG2-13800HE	TBD	In Development
PCOM-B883VG2-13600HE	TBD	In Development
PCOM-B883VG2-13300HE	TBD	In Development
PCOM-B883VG2-1370PE	TBD	In Development
PCOM-B883VG2-1350PE	TBD	In Development
PCOM-B883VG2-1320PE	TBD	In Development
PCOM-B883VG2-1365UE	TBD	In Development
PCOM-B883VG2-1345UE	TBD	In Development
PCOM-B883VG2-1315UE	TBD	In Development
PCOM-B883VG2-U300E	TBD	In Development

Accessory	Ordering P/N	Status
Cooler	TBD	In Development
Heatsink	TBD	In Development
Heatspreader	TBD	In Development
PCOM-C880 (ATX carrier board)	AB1-3L34Z	In Development

BLOCK DIAGRAM

PCOM-B883VG2

