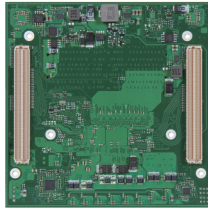
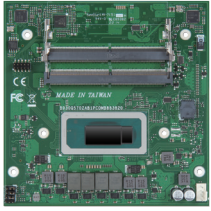


PCOM-B883VG2

COM-HPC® Client module Size B module with Intel® 12th Gen H/P/U Processor
DDR5 SO-DIMM, DDI, PCIe Gen 4, USB4, USB 3.2 Gen2, 2.5 Gigabit TSN Ethernet, discrete TPM 2.0, eDP, SATA III



FEATURES

- 12th Gen Intel® Core™ , Celeron® 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, and 1x PCIe Gen4 x8(selected SKU), 2x Gen4 x4, and 8x PCIe Gen3 x1
- 2x USB4, 2x USB3.2 Gen 2, 8x USB2.0, 2x SATAIII, 3x DDI, eDP



PCOM-B883VG2 is COM-HPC module based on Intel® 12th Gen H/P/U 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 45~15W theraml and industrial use condition for wide range application. PCOM-B883VG2 supports PCIe Gen4 up to 16x lanes, 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 Gen 2, 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				
	i7-12800HE	i5-12600HE	i3-12300HE	i7-1270PE	i5-1250PE	i3-1220PE	i7-1265UE	i5-1245UE	i3-1215UE	Celeron 7305E	
Cores P+E/Threads	6P + 8E/20T	4P + 8E/16T	4P + 4E/12T	4P + 8E/16T	4P + 8E/16T	4P + 4E/12T	2P + 8E/12T	2P + 8E/12T	2P + 4E/8T	1P + 4E/5T	
Frequency	2.4 GHz	2.5 GHz	1.9 GHz	1.8 GHz	1.7 GHz	1.5 GHz	1.7 GHz	1.5 GHz	1.2 GHz	1.0 GHz	
Turbo Frequency	4.6 GHz	4.5 GHz	4.3 GHz	4.5 GHz	4.4 GHz	4.2 GHz	4.7 GHz	4.4 GHz	4.4 GHz	N/A	
Intel® Smart Cache	24 MB	18 MB	12 MB	18 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.	1.35 GHz	1.30 GHz	1.15 GHz	1.35 GHz	1.30 GHz	1.25 GHz	1.25 GHz	1.20 GHz	1.10 GHz	1.10 GHz	
Video Decode Boxes	2	2	1	2	2	1	2	2	1	1	
Processor TDP	45 W/35 W			28 W			15 W				
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® I225LM		
Serial I/O	GPIO		8 bit GPIO (default 4 input/4 output)
	I ² C		Baud Rate : 400KHz
	SMBus		Baud Rate : 100KHz
	UART		TX/RX signal only
PCI Express Gen4	1x Gen4 x8 (selected SKU), 2x Gen4 x4		
PCI Express Gen3	8x Gen 3.0 x1 (2 lanes share with SATA)		
Display	Default		Options
	eDP		eDP up to HBR3
			DP up to HBR3
	DDI		DP up to HBR3
Security			Resolution
			7680 x 4320@60Hz
			7680 x 4320@60Hz
			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
Certification	Contact us
MTBF	TBD
Vibration	TBD
OS	Windows 10/11 Ubuntu

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B883VG2-12800HE	TBD	In Development
PCOM-B883VG2-12600HE	TBD	In Development
PCOM-B883VG2-12300HE	TBD	In Development
PCOM-B883VG2-1270PE	TBD	In Development
PCOM-B883VG2-1250PE	TBD	In Development
PCOM-B883VG2-1220PE	TBD	In Development
PCOM-B883VG2-1265UE	TBD	In Development
PCOM-B883VG2-1245UE	TBD	In Development
PCOM-B883VG2-1215UE	TBD	In Development
PCOM-B883VG2-7305E	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

