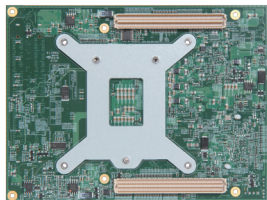
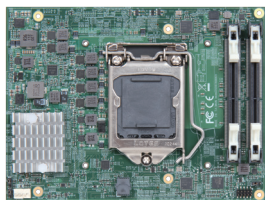


PCOM-B880VG2

10th Gen Intel® Core™/Xeon® W Processors based
COM-HPC® Client module Size C with dual DDR4
SO-DIMM, DDI, eDP, Dual 2.5 Gigabit Ethernet,
SATA III, and USB 3.2



FEATURES

- Intel® Xeon® W, 10th Gen Intel® Core™, Pentium® and Celeron® processors
- 2x Non-ECC/ECC DDR4 2933 SO-DIMMs, up to 64GB
- Dual 2.5G Ethernet with TSN Capability
- USB 3.2 Gen 2/2.0, 2x SATA III, 1x PCIe 3.0 x16, and 20x PCIe 3.0 x1



PCOM-B880VG2 is COM-HPC® Client, Size C module powered by 10th Gen Intel® Core™/Xeon® W platform (Formerly Comet Lake-S). The COM-HPC® Client form factor supports more I/O interfaces and power for desktop level CPU enabling wider computing demand applications. The desktop CPU on module offers customer higher computing power but lower cost comparing to mobile solutions. PCOM-B880VG2 supports both ECC and Non-ECC DDR4 by different PCH SKUs (Q470E/W480E), which can be adapted to different applications. This module provides one PCIe x16, four USB 3.2 Gen2, two SATA III, PCIe storage and up to twenty PCIe x1 lanes.

CPU and General

PCOM-B880VG2										
COM HPC Client, Size C										
Product	PCOM-B880VG2									
Form Factor	COM HPC Client, Size C									
CPU SKU	TDP	Core	Threads	Cache	Base Freq	Max Turbo Freq	Max Memory MT/s	W480E	Q470E	ECC
Xeon W-1250E	80W	6	12	12MB	3.5GHz	4.7GHz	2933 MT/s	Yes	No	Yes
Xeon W-1290TE	35W	10	20	20MB	1.8GHz	4.5GHz				
Xeon W-1270TE	35W	8	16	16MB	2.0GHz	4.4GHz				
Xeon W-1250TE	35W	6	12	12MB	2.4GHz	3.8GHz				
i9-10900TE	35W	10	20	20MB	1.8GHz	4.5GHz	2666 MT/s	Yes	Yes	No
i7-10700TE	35W	8	16	16MB	2.0GHz	4.4GHz				
i5-10500E	65W	6	12	12MB	3.1GHz	4.2GHz				
i5-10500TE	35W	6	12	12MB	2.3GHz	3.7GHz				
i3-10100E	65W	4	8	6MB	3.2GHz	3.8GHz	2400 MT/s	No	Yes	Yes
i3-10100TE	35W	4	8	6MB	2.3GHz	3.6GHz				
Pentium G6400E	65W	2	4	4MB	3.8GHz	3.8GHz				
Pentium G6400TE	35W	2	4	4MB	3.2GHz	3.2GHz				
Celeron G5900E	65W	2	2	2MB	3.2GHz	3.2GHz	2400 MT/s	No	No	No
Celeron G5900TE	35W	2	2	2MB	3.0GHz	3.0GHz				

I/O Interface

I/O Interface			
SATA	2 x SATA III		
NVME	2x PCIe NVME Gen3 x4, with Intel®RST		
USB	4x USB 3.2 Gen2 x1 8x USB 2.0		
Ethernet	Intel® I225LM x2		
BMC	BOM Optional, Share PCIe Link with 2nd 2.5G NBASE-T		
AUDIO	HDA		
Serial I/O	GPIO	8 bit GPIO (default 6 input / 6 output)	
	I²C	Baud Rate : 400KHz	
	SMBus	Baud Rate : 100KHz	
	eSPI		
	UART	TX/RX signal only	
PEG	1x Gen3 x16 (Group 1) (Bifucation Support: 2 x8, or 1x8 + 2x4)		
PCI Express	8x Gen3 x1 / 4x Gen3 x1 + (2x Gen3 x2 / 1x Gen3 x4) (Group 0 Low) 2x Gen3 x4 / 1x Gen3 x4 + 2x Gen3 x2 / 4x Gen3 x2 (Group 0 High) 1x Gen3 x4 (Group 2, #32 ~ #35)		
Display	Default	Options	Resolution
	eDP 1.4		4096 x 2304@60Hz
	DDI 1, 2, & 3	DP 1.4	4096 x 2304@60Hz
		HDMI 2.0a	4096 x 2160@60Hz
HDMI 1.4		4096 x 2160@30Hz	
Security	TPM 2.0 (Infineon SLB9670), Intel® AES		

MECHANICAL & ENVIRONMENT

Dimension	160mm x 120mm
Power DC IN	Normal: +12V DC AT/ATX mode
Storage Temperature	-20°C to 80°C
Operating Temperature	0°C to 60°C
Certification	Contact us
MTBF	TBD
Vibration	TBD
OS	Windows 10 Ubuntu, CentOS

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B880VG2-W480E	AB1-3L36Z	In Development
PCOM-B880VG2-Q470E	AB1-3L35Z	In Development

Accessory	Ordering P/N	Status
Cooler 80W	B9971030	Contact us
Cooler 65W	TBD	Contact us
Cooler 35W	TBD	Contact us
PCOM-C880 (ATX carrier board)	AB1-3L34Z	In Development

BLOCK DIAGRAM

PCOM-B880VG2

COM HPC® Client Module
Size C 160x120mm

ATX Mode

+12 VDC
+5 VDC

0 ~ +60° C

