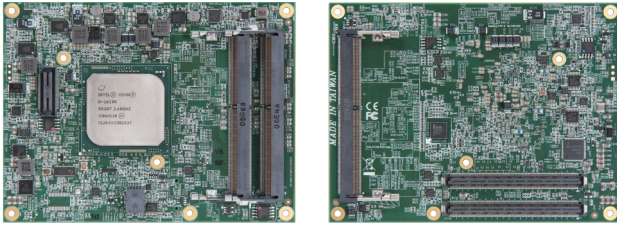


PCOM-B700G-NS

Intel® Xeon® D-1600 series SoC based on Type 7 Basic COM Express® module



FEATURES

- Intel® Xeon® D-1600 Series Processor (Hewitt Lake)
- 3x DDR4 SO-DIMM
- TDP 35w to 45w consumption
- Support -40°C to 85 °C wide temperature(Selected SKU)
- Support Intel® QuickAssist Technology (Intel® QAT)



PCOM-B700G-NS, a Type 7 COM Express® basic size(125 x 95 mm) module which based on Intel® Hewitt Lake Xeon® D-1600 series processors. In this architecture, it could provide up to 8 cores and up to 16 threads processors within the TDP from 35w to 45w, and 4x 10G KR ports and up to 30 Gbps of cryptography offload with Intel® QuickAssist Technology (Intel® QAT), it's also extending 24x PCIe 3.0 and 8x PCIe 2.0 lanes, 4x USB 3.2 Gen1, and 2x SATA III ports. A selected SKU (D-1649N) support wide-temperature range. PCOM-B700G-NS offer an effective upgrade path for solutions already using the previous D-1500 COM Express modules. Portwell want to promotes PCOM-B700G-NS as vertical solution to aim in the different versatile applications, such as edge computing, automation, military, transportation and so on.

General

General					
Product	PCOM-B700G-NS				
Form Factor	Type 7, Basic Form Factor COM-Express® (125 x 95 mm)				
Processor	Intel® Xeon®				
	D-1649N	D-1633N	D-1623N	D-1627	D-1649N (wide-temp)
Core	8	6	4	4	8
Freq.	2.3 GHz	2.5 GHz	2.4 GHz	2.9 GHz	2.3 GHz
Turbo	3.0 GHz	3.2 GHz	3.2 GHz	3.2 GHz	3.0 GHz
Cache	12 MB	9 MB	6 MB	6 MB	12 MB
Processor Graphics	N/A				
Graphics Base Freq.	N/A				
Ethernet	4x 10G KR 1x GbE LAN (I210AT)				4x 10G KR 1x GbE LAN (I210IT)
Intel® QAT (Gbps)	20 Gbps	10 Gbps	10 Gbps	N/A	20 Gbps
Processor TDP	45 W	45 W	35 W	45 W	45 W
BIOS	AMI BIOS				
Memory	3x DDR4 SO-DIMM				
Temperature Range	0°C to 60 °C	0°C to 60 °C	0°C to 60 °C	0°C to 60 °C	-40°C to 85 °C

I/O Interface

SATA	2 x SATA III	
USB	8 x USB 2.0 4 x USB 3.2 Gen1	
Ethernet	4x 10G KR 1x GbE LAN (I210AT/IT)	
Serial I/O	GPIO	8 GPIO
	I ² C	Baud Rate: 400KHz
	SMBus	Baud Rate: 100KHz
	UART	2 Serial Port (Tx/Rx)
PCI Express	24x PCIe 3.0 8x PCIe 2.0	
Display	N/A	
Security	TPM 2.0, Intel®AES	

PCOM-B700G-NS

MECHANICAL & ENVIRONMENT

Dimension	125 x 95mm
Power DC IN	12v ±5%
Storage Temperature	-40°C to 85°C
Operation Temperature	0°C to 60°C (selected SKU -40°C to 85 °C)
Certification	Contact us
MTBF	TBD
Vibration	TBD
OS	Windows 10 Linux Wind River7/Ubuntu/Yocto RTOS Windriver

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B700G-NS-D1649N	AB1-3K99	Contact us
PCOM-B700G-NS-D1633N	AB1-3L02	Contact us
PCOM-B700G-NS-D1623N	AB1-3L00	Contact us
PCOM-B700G-NS-D1627	AB1-3L01	Contact us
PCOM-B700G-NS-D1649N-WT	AB1-3L89	Contact us

Accessory	Ordering P/N	Status
Cooler	B9972000	Available
Heat Sink	B830B350	Available
Heat Spreader	B830B360	Contact us

BLOCK DIAGRAM

PCOM-B700G-NS

COM Express® Type 7
Basic Size 125x95mm

AT / ATX Mode

-40° C ~ +85° C
(Selected SKUs)

