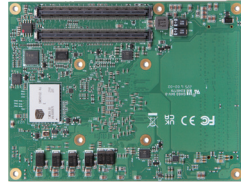
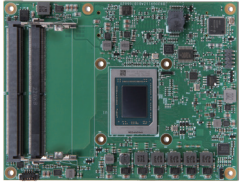


PCOM-B706GT

COM-Express® Type 7 Basic module with AMD® Embedded Ryzen™ V3000 CPU Family equipped on-module NVME SSD



FEATURES

- AMD® Embedded Ryzen™ V3000 CPU featuring "Zen 3" core
- 2x DDR5 4800 MT/s SO-DIMM, 2x 10G KR Port
- 10W ~ 54W cTDP with -40 ~ 85 °C support on selected SKU
- Up to 16x PCIe Gen 4 lanes for high speed interconnection
- Optional on-module PCIe x2 NVME storage



PCOM-B706GT, a Type 7 COM Express® basic size (125mm x 95 mm) module which based on AMD® Embedded Ryzen™ V3000 cpu family. It provide up to 8 cores and 16 threads processors with cTDP from 10W to 54W, and 2x 10G KR ports. It provide PCIe Gen4 lanes with 16.0 GT/s transfer rate to satisfy the demand of throughput on different applications. PCOM-B706GT provide 16x PCIe lanes, 4x USB 3.2 Gen1, and 2x SATA III ports to meet COM Express type 7 requirement. It also provide on-module high speed SSD storage chip for small footprint embedded equipment with security concern. A selected SKU (V3C18I) support wide-temperature range with powerful 8 core / 16 thread still provide strong computing power for critical edge application. PCOM-B706GT offer a new upgrade path for compute demanding applications such as software defined networking, edge computing, automation, military, transportation and so on.

General

General						
Product	PCOM-B706GT					
Form Factor	Type 7, Basic Form Factor COM-Express® (125 x 95 mm)					
Processor Model	AMD® Embedded Ryzen V3000 CPU					
	V3C14	V3C16	V3C18	V3C18I	V3C44	V3C48
Core / Thread Count	4C / 8T	6C / 12T	8C / 16T	8C / 16T	4C / 8T	8C / 16T
Base Frequency	2.3 GHz	2.0 GHz	1.9 GHz	1.9 GHz	3.5 GHz	3.3 GHz
1T Boost Frequency	3.8 GHz	3.8 GHz	3.8 GHz	3.8 GHz	3.8 GHz	3.8 GHz
L2 Cache	2 MB	3 MB	4 MB	4 MB	2 MB	4 MB
L3 Cache	8 MB	16 MB	16 MB	16 MB	8 MB	16 MB
Ethernet	2x 10G KR 1x GbE LAN					
Nominal TDP (W)	15 W	15 W	15 W	15 W	45 W	45 W
cTDP (W)	10 ~ 25 W	10 ~ 25 W	10 ~ 25 W	10 ~ 25 W	35 ~ 54 W	35 ~ 54 W
BIOS	AMI BIOS					
Memory	2x DDR5 SO-DIMM Up to 4800 MT/s					
Temperature Range	0 ~ 60 °C	0 ~ 60 °C	0 ~ 60 °C	-40 ~ 85 °C	0 ~ 60 °C	0 ~ 60 °C

I/O Interface

SATA / Storage	2x SATA III or 1x on-module PCIe x2 NVME (Optional)	
USB	4x USB 2.0 4x USB 3.2 Gen1	
Ethernet	4x 10G KR 1x GbE LAN	
Serial I/O	GPIO	8 GPIO
	I ² C	Baud Rate: 400KHz
	SMBus	Baud Rate: 100KHz
	UART	2 Serial Port (Tx/Rx)
PCI Express	1x PCIe x8 or 2x PCIe x4, Max PCIe Gen 4 [PCIe #16 ~ #23] 1x PCIe x4 + 3x PCIe x1 or 2x PCIe x2 + 3x PCIe x1, w/ on-module GbE LAN [PCIe #0 ~ #7] 1x PCIe x8 or 1x PCIe x4 + 4x PCIe x1 or 2x PCIe x2 + 4x PCIe x1, w/o on-module GbE LAN [PCIe #0 ~ #7]	
Security	TPM 2.0	

MECHANICAL & ENVIRONMENT

Dimension	125mm x 95 mm
Power DC IN	12v ±5%
Storage Temperature	-40°C to 80°C
Operating Temperature	0°C to 60°C (Selected SKU -40°C to 85 °C)
Certification	Contact us
MTBF	TBD
Vibration	TBD
OS	Linux Ubuntu 20.04.3 LTS / Yocto

ORDERING GUIDE

Product	Ordering P/N	Status
PCOM-B706GT-V3C48	AB1-3R17Z	In design
PCOM-B706GT-V3C44	AB1-3R15Z	In design
PCOM-B706GT-V3C18I	AB1-3R19Z	In design
PCOM-B706GT-V3C18	AB1-3R18Z	In design
PCOM-B706GT-V3C16	AB1-3R16Z	In design
PCOM-B706GT-V3C14	AB1-3R14Z	In design

Accessory	Ordering P/N	Status
Cooler	TBD	In design
Heat Sink	TBD	In design
Heat Spreader	TBD	In design

BLOCK DIAGRAM

PCOM-B706GT

