

RBT970

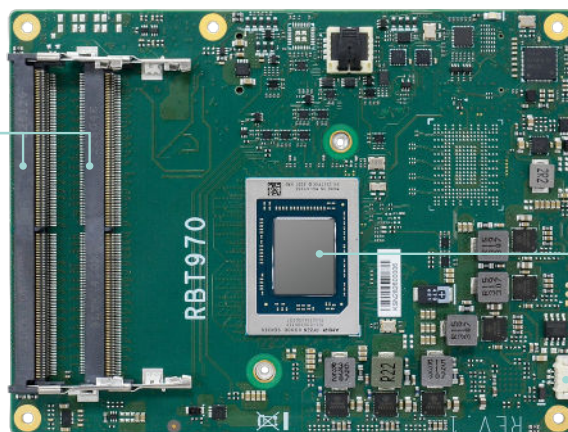
Server



AMD Ryzen™ Embedded V3000 Series
COM Express® Basic



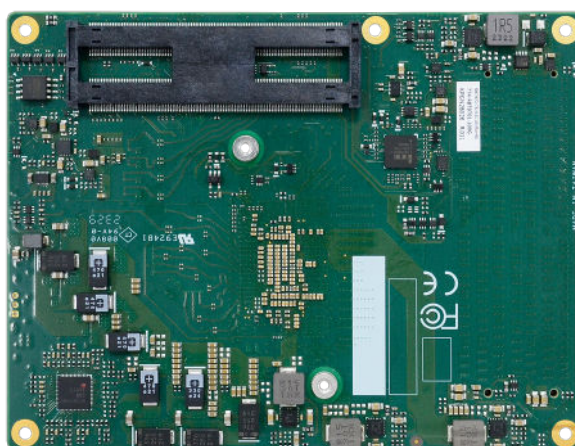
DDR5 4800MHz SODIMM



AMD Ryzen™ Embedded
V3000 Series processors

CPU Fan

Top View



Bottom View

KEY FEATURES



DDR5

Dual DDR5 SODIMM
4800MHz up to 64GB



Extended Temperature

Support extended
operating temperature:
-40 to 85°C



High Speed Ethernet

Support 2 x 10G Ethernet
and 1 x 2.5G Ethernet



Multiple Expansion

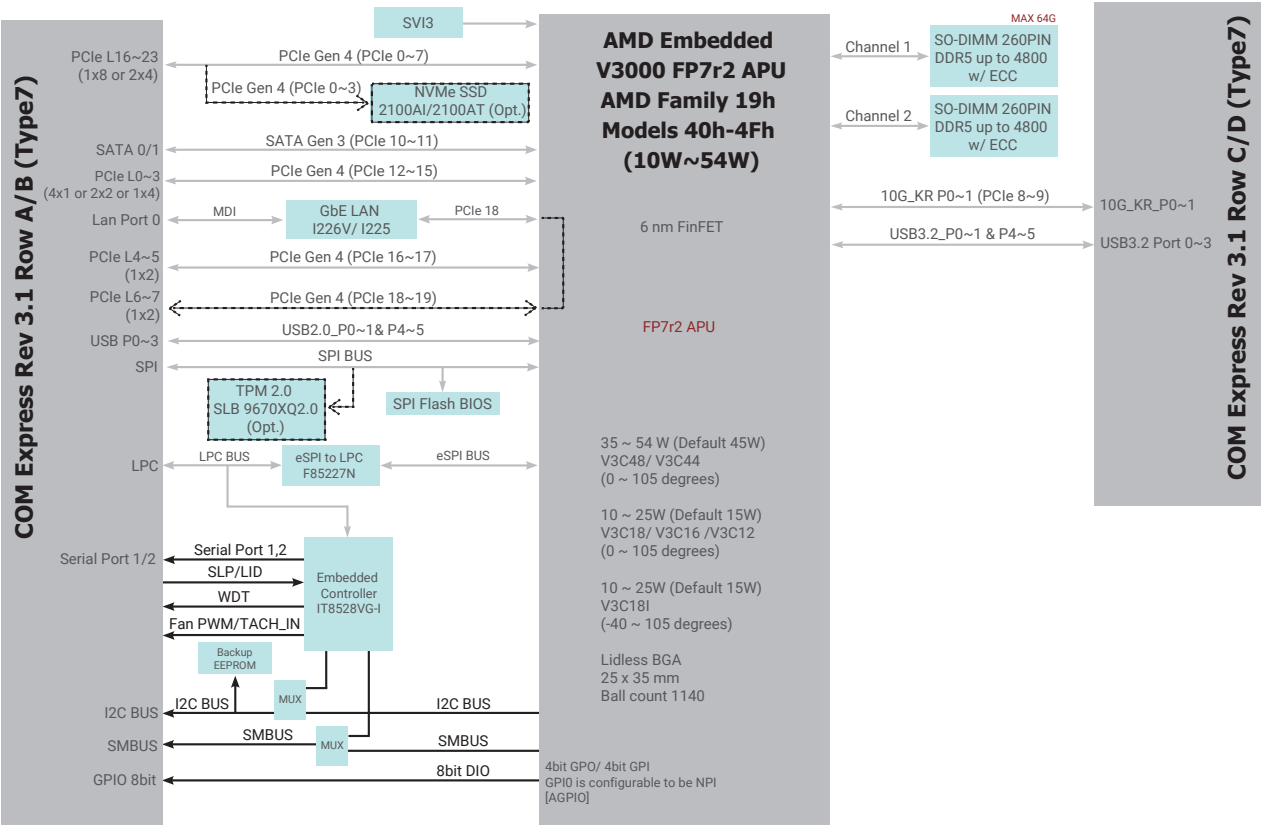
1 PCIe x14 (Gen 4),
1 SMBus, 1 I²C,
1 LPC, UART



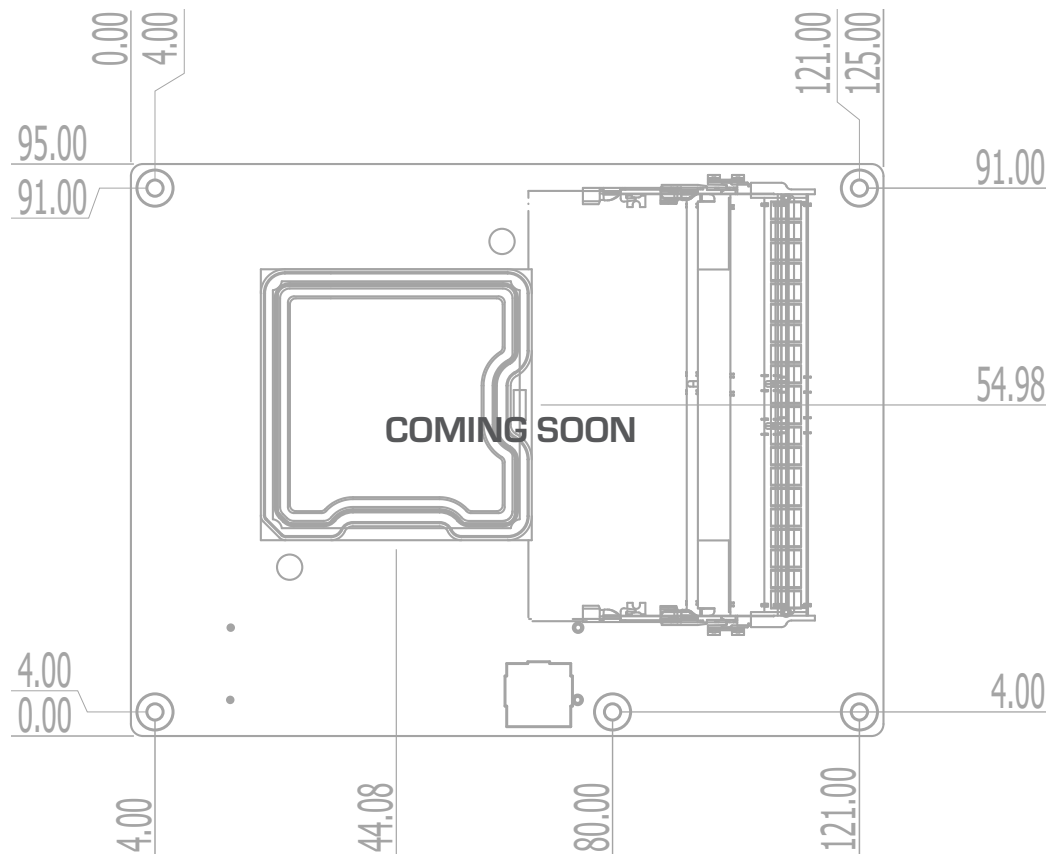
Rich I/O

4 USB 3.2, 4 USB 2.0,
2 SATA 3.0

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

SYSTEM	Processor	AMD® Embedded Ryzen™ V3000 CPU Family V3C48, 45W, 8C/16T, Base Freq, 3.3GHz V3C44, 45W, 4C/8T, Base Freq, 3.5GHz V3C18, 15W, 8C/16T, Base Freq, 1.9GHz V3C16, 15W, 6C/12T, Base Freq, 2.0GHz V3C14, 15W, 4C/8T, Base Freq, 2.3GHz V3C18I, 15W, 8C/16T, Base Freq, 1.9GHz, Industrial Temp	
	Memory	Two 262-Pin SODIMM up to 64GB Dual Channel DDR5 4800MHz (Memory max speed depends on CPU SKU)	
	BIOS	AMI SPI 256Mbit	
	Interface	Default: B1 : 1 PCIe x4 or 2 PCIe x2 or 4 PCIe x1 B2 : 1 PCIe x2 B3 : 1 PCIe x8 or 2 PCIe x4 1 x SPI 1 x I ² C 1 x SMBus 2 x UART (TX/RX)	
ETHERNET	Controller	Supports 2 x 10GBASE-KR Supports 1 x 2.5GbE and 1000/100/10 Mbit/s Ethernet connection	
I/O	USB	4 x USB 3.2 4 x USB 2.0	
	SATA	2 x SATA 3.0 (up to 6Gb/s)	
	DIO	1 x 8-bit DIO (4 in, 4 out)	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 15 to 255 Seconds	
SECURITY	TPM	Available upon request	
POWER	Type	12V, 5VSB, VCC_RTC (ATX mode) 12V, VCC_RTC (AT mode)	
	Consumption	TBD	
OS SUPPORT	Linux	Ubuntu 22.04.1 Kernel 6.1.	
ENVIRONMENT	Temperature	Operating: 0 to 60°C, -40 to 85°C Storage: -40 to 85°C	
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH	
	MTBF	TBD	
	Dimensions	COM Express® Basic	95mm (3.74") x 125mm (4.9")
MECHANISM	Compliance	PICMG COM Express® R3.1, Type 7	
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS	

PACKING LIST

• 1 RB970 board	
• 1 Cooler (Height: 47.80 mm)	TBD (0 to 60°C) TBD (-40 to 85°C)