KPT193

AMD Ryzen AI P100 Series Processors
mini-ITX



KEY FEATURES

DDR5

2 DDR5 SODIMM up to 64GB with ECC support

4K High Resolution

Supports 4K resolution

4 Independent Displays

DP2.0 x4

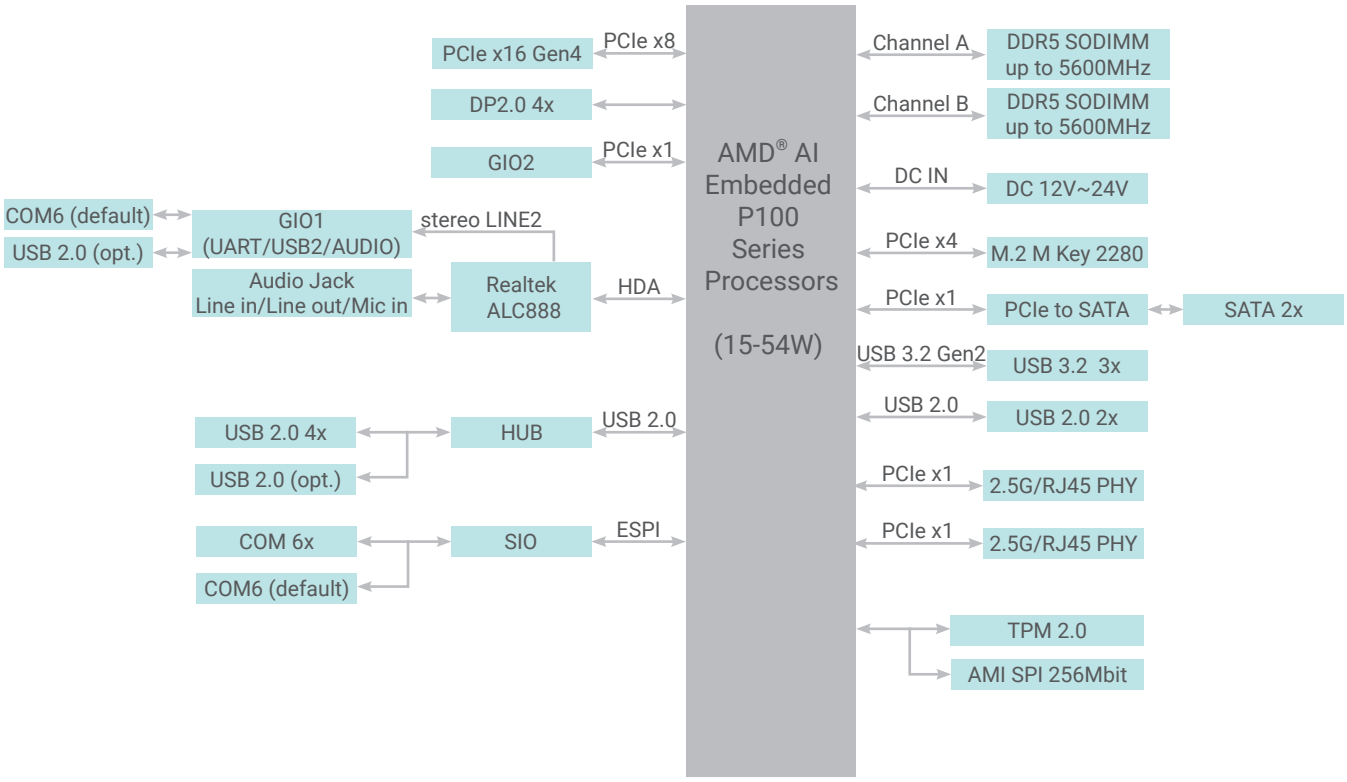
Expansion

1 PCIE Gen4 x16 Slot (x8 Signal),
1 M.2 M key (PCIE)

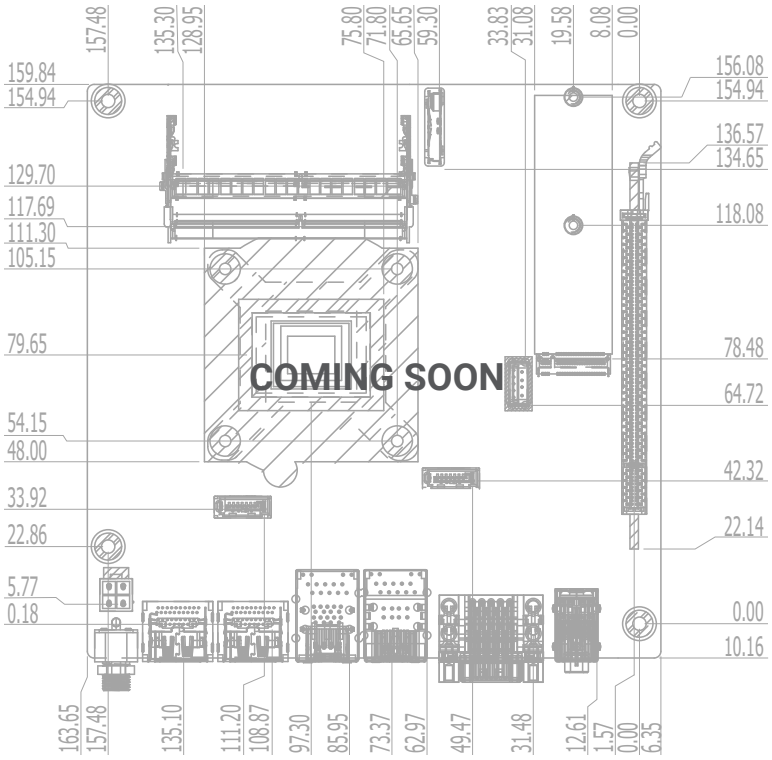
Rich I/O

2 2.5GbE RJ45, 2 USB 3.2 Type-A,
2 USB2.0 Type A, 2 COM D-Sub,
1 Audio Jack Line-in/Line-out/Mic-in,
4 RS232 (ccTalk/TTL),
4 USB 2.0 headers,
Gaming I/O(PCIE,UART/USB2.0,Audio)

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

SYSTEM	**Processor**	AMD Ryzen AI P100 Series Processors
	Memory	2 x 262-pin dual-channel SODIMM DDR5 5600MHz with ECC/non-ECC support up to 64GB (32GB per Dimm)
	BIOS	AMI SPI 256Mbit
GRAPHICS	**Controller**	RDNA3.5 graphics with up to 8 WGPs (Work Group processors)
	Display	DP2.0
	Quad Displays	4 x DP2.0
EXPANSION	**PCIE Slot**	1 x PCIE Gen4 x16 slot (x8 Signal)
	M.2	1 x M.2 M Key 2280 slot (PCIE Gen4 x4)
	Gaming I/O	GIO1 (UART, USB2, AUDIO R/L) GIO2 (PCIE x1)
AUDIO	**Audio Codec**	1 x Realtek ALC888S
ETHERNET	**Controller**	2 x Intel I226-V (10/100/1000/2500 Mbps)
REAR I/O	**Ethernet**	2 x 2.5GbE (RJ-45)
	USB	2 x USB 3.2 Type A 2 x USB 2.0 Type A
	Display	4 x DP++ display
	Audio	1 x Front audio (Line-out, Line-in, Mic-in)
	Serial	1 x Full RS232 1 x RS232/RS422/RS485
INTERNAL I/O	**Serial**	2 x RS232 / TTL header 2 x RS232 / ccTalk header
	USB	4 x USB 2.0 port (pitch 2.0mm) 1 x USB 2.0 vertical Type A
	SATA	2 x SATA3 (6Gb/s) 2 x SATA Power
	DIO	1 x 8-bit header with power
	Case Open	1 1x2p header
	Audio	1 x S/PDIF (audio in & out) (Signal from ALC888S)
	SMBus/ I2C	2 x I2C 1 x SPI
WATCHDOG TIMER	**Output & Interval**	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	**TPM**	dTPM 2.0(Default), fTPM (Option)
POWER	**Type**	Single 12~24V +/-5% DC
	Connector	DC-in Jack (Request) Straight Type Connector (4-pin) (Default)
	Consumption	TBD
	RTC Battery	CR2032 coin cell
OS SUPPORT	**Microsoft**	Windows 11 24H2 GAC Windows 11 LTSC
	Linux	Ubuntu 24.04
ENVIRONMENT	**Temperature**	**Operating:** -5 to 65°C **Storage:** -40 to 85°C
	Humidity	10 to 90% RH
	MTBF	TBD
MECHANICAL	**Dimensions**	Mini-ITX Form Factor 170mm (6.7") x 170mm (6.7")
	Height	**PCB:** 1.6mm **Top Side:** TBD **Bottom Side:** TBD
STANDARDS AND CERTIFICATIONS	**Certification**	CE, FCC, RoHS

PACKING LIST

• 1 motherboard	
• 1 I/O shield	TBD

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