SAPPHIRE

SAPPHIRE TM-FP6-4DP Embedded Thin (<26mm) Mini-ITX Platform

Thin Form Factor, High Performance

The SAPPHIRE TM-FP6-4DP Thin (<26mm) Mini-ITX form factor embedded motherboard is based on the latest AMD Ryzen™ Embedded V2000 Series Family of APUs which feature the industry leading AMD Radeon™ GPU graphics combined with the eight/six-core high-performance "Zen 2" CPU.

Four 4K displays can be supported in addition to dual-channel DDR4-3200 memory, and M.2 for WiFi and SSD expansion. The SAPPHIRE TM-FP6-4DP is an ideal solution for thin form factor IPC, signage, kiosks, robotics, POS, thin clients, medical imaging and industrial control.

AMD Ryzen™ Embedded processors

- ▶ "Zen2" Architecture with 7nm FinFET
- ▶ Eight/Six CPU cores sixteen/twelve threads
- ▶ AMD Radeon™ Graphics up to 7 Compute Units
- ▶ Dual-channel DDR4 Up to 3200 MT/s

Features

- ▶ Up to Four DisplayPort 1.4 Displays
- ▶ One LVDS (Shared with 1 DP)
- ▶ Two USB 3.2 Gen2 and 2 USB 2.0 ports
- ▶ Two 10/100/1000 Mbps Ethernet port
- ▶ Four (1x4) headers support USB2.0
- ▶ One (4x2) header supports USB2.0
- ▶ Two (5 x 2) header – RS232
- ▶ TPM Security

Expansion Slots

- ▶ M.2 2280 M key slot for NVMe SSD(up to 2TB)
- ▶ M.2 2230 E key slot

SKU		V2000
Form Factor		Thin Mini-ITX
CPU		AMD Ryzen™ Embedded V2000
TDP		Max. 25W
Cooler		Active/Passive
System Memory		2x DDR4-Up to 3200, Max. 64GB (Right angle)
		DDR4 SO-DIMM (ECC/Non ECC)
External I/O Edge Connectors	Displays	4 x DP1.4 + 1 x LVDS(Shared with 1 x DP1.4)
	Ethernet	2 x RJ45 10/100/1000 Mbps
	COM	N/A
	Audio	Combo Mic In/Audio out Jack (Front)
	USB	2 x USB3.1 2 x USB2.0
Internal I/O Headers	COM	2 x (5 x 2) header – RS232 (Jumperless)
	Front Panel	1 x (2 x 4) Wafer
	Audio	1x Speaker , 1X line in , 1xMic in
	USB	4 x (1x4 wafer) USB2.0 1 x (4x2 wafer) USB2.0
	Others	N/A
Security	TPM	Infineon SLB9670 TPM2.0 on board
	Chassis	N/A
Power		12 - 19V DC power jack
		2-pin power header (with protection diode)
Expansion Slots		1x M.2(Key M, 2280) with PCIe x 4 for SSD
		1 x M.2 (Key E, 2230) with PCIe x 1 and USB2.0 for Wireless
		2 x SATA3 (6.0 Gb/s) + 1 x SATA Power
Miscellaneous		Watchdog timer trigger signal
Dimensions (L x W x H)		Active/Passive: 170 x 170 x 25.5 mm

https://www.sapphiretech.com/en/embedded