

## 2U2S SERVER PLATFORM



## Thunder SX TN70E-B7106

B7106T70EV12HR / B7106T70EV8E4HR



### Front View



- (12) 3.5"/2.5" Hot-Swap SSD/HDDs devices



- (8) 3.5"/2.5" Hot-Swap SSD/HDDs + (4) NVMe devices

### Back View



- (1+1) 770W RPSU, 80 PLUS Platinum
- (2) Hot-Swap 2.5" Drive Bays

## 2U2S server platform designed for 3D rendering, technical computing applications

- Max up to (12) 3.5"/2.5" Hot-Swap SSD/HDDs devices at front and (2) 2.5" Hot-Swap SSD devices at rear  
Or (8) 3.5"/2.5" Hot-Swap SSD/HDDs devices + (4) NVMe devices at front and (2) 2.5" Hot-Swap SSD devices at rear
- Dual LGA3647 socket supports (2) Intel® Xeon® Scalable Processor
- (8+8) DIMM slots DDR4 RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 2666
- Supporting up to 512GB RDIMM/ 1,024GB LRDIMM/ 768GB LRDIMM 3DS  
\*Follow latest Intel DDR4 Memory POR
- Max up to (2) PCI-E Gen3 x16 slots (w/ x8 link), (4) PCI-E Gen3 x8 slots  
(1) PCI-E Gen3 x16 OCP 2.0 slots (conn.A + conn.B)  
(1) PCI-E Gen3 x16 OCP 2.0 slots (conn.A+conn.B+conn.C)
- (2) GbE ports + (1) PHY port (via Intel® I210-AT + via Realtek® RTL8211E)
- Onboard BMC w/ IPMI and iKVM support
- (1+1) 770W RPSU, 80 PLUS Platinum

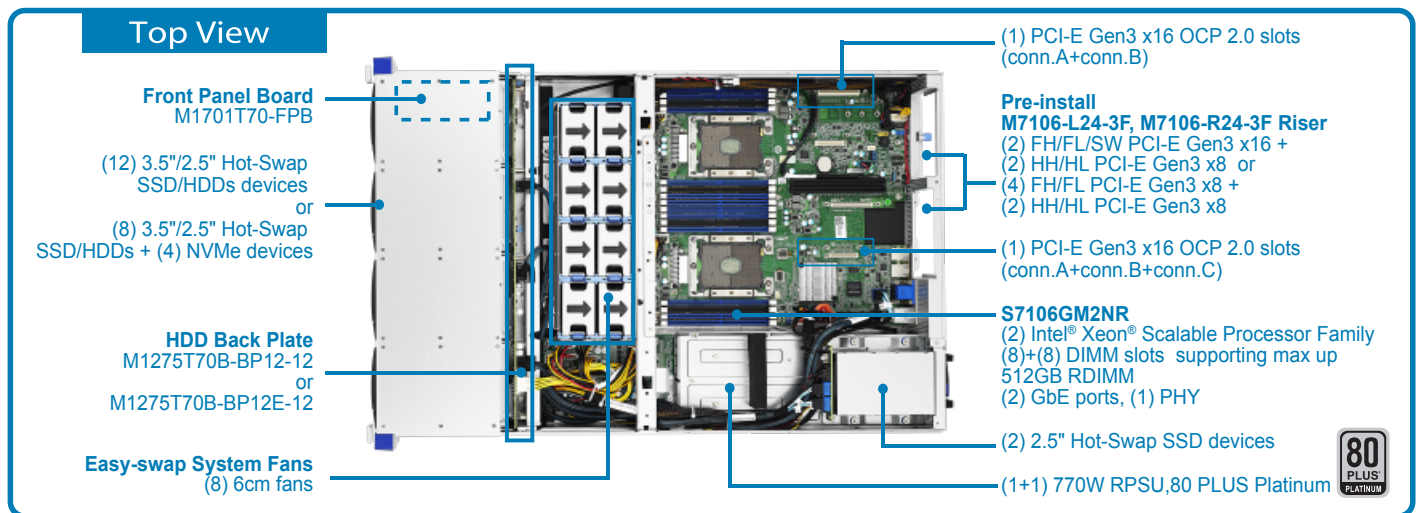


# Thunder SX TN70E-B7106

B7106T70EV12HR / B7106T70EV8E4HR

# TYAN

## Specifications



<b>System</b>	<b>Form Factor</b>	2U Rackmount
	<b>Chassis Name</b>	TN70E
	<b>Dimension (H x W x D)</b>	27.56" x 17.32" x 3.43" (700 x 440 x 87mm)
	<b>Motherboard</b>	S7106GM2NR
<b>Front Panel</b>	<b>Buttons</b>	(1) RST, (1) PWR w/ LED, (1) UID
	<b>LEDs</b>	(1) ID, (1) UID, (1) BMC event
	<b>I/O Ports</b>	(2) USB 2.0 ports
<b>Front External Drive Bays</b>	<b>Type / Q'ty</b>	(12) Hot-Swap 3.5"/2.5" Drive Bays
	<b>HDD backplane support</b>	(12) SAS 12Gb/s, SATA 6Gb/s, (4) NVMe ports
	<b>Supported HDD Interface</b>	(12) SATA 6Gb/s or (8) SATA 6Gb/s + (4) NVMe
<b>Rear External Drive Bays</b>	<b>Type / Q'ty</b>	(2) Hot-Swap 2.5" Drive Bays
	<b>HDD backplane support</b>	(2) SAS 12Gb/s, SATA 6Gb/s
	<b>Supported HDD Interface</b>	(2) SATA 6Gb/s
<b>System Cooling Configuration</b>	<b>FAN</b>	(8) 6cm fans
	<b>Type</b>	RPSU
<b>Power Supply</b>	<b>Input Range</b>	AC 100-127V/10A, AC 200-240V/5A
	<b>Efficiency</b>	80-PLUS Platinum
	<b>Output Watts</b>	770 Watts
	<b>Redundancy</b>	1+1
<b>Processor</b>	<b>Supported CPU Series</b>	(2) Intel® Xeon® Scalable Processor
	<b>Thermal Design Power (TDP) wattage</b>	Max up to 165W
<b>Chipset</b>	<b>Chipset</b>	Inte® C621
	<b>Super I/O</b>	-
<b>Memory</b>	<b>Supported DIMM Qty</b>	(8)+(8) DIMM slots
	<b>DIMM Type / Speed</b>	DDR4 RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 2666
	<b>Capacity</b>	Up to 512GB RDIMM/ 1,024GB LRDIMM/ 768GB LRDIMM 3DS *Follow latest Intel® DDR4 Memory POR
	<b>Memory channel</b>	6 Channels
<b>Expansion Slots</b>	<b>Memory voltage</b>	1.2V
	<b>PCI-E</b>	(2) sets of the following expansion combination: (2) PCI-E Gen3 x8 slots, (1) PCI-E Gen3 x16 slots (w/ x8/16 link)
	<b>Pre-install TYAN Riser Card</b>	M7106-L24-3F, M7106-R24-3F
	<b>Pre-install TYAN OCP Riser Card</b>	-
	<b>Others</b>	(1) PCI-E Gen3 x16 OCP 2.0 slots (conn.A+conn.B) (1) PCI-E Gen3 x16 OCP 2.0 slots (conn.A+conn.B+conn.C)
	<b>LAN</b>	(2) GbE ports, (1) PHY
<b>LAN</b>	<b>Port Q'ty</b>	(2) GbE ports, (1) PHY
	<b>Controller</b>	Inte® I210-AT
	<b>PHY Controller</b>	Realtek® RTL8211E

<b>Storage</b>	<b>SATA</b>	<b>Connector</b>	(2) Mini-SAS HD (8-ports)
		<b>Controller</b>	Intel® C621
		<b>Speed</b>	6.0 Gb/s
		<b>RAID</b>	RAID 0/1/10/5 (Intel RSTe)
<b>Storage</b>	<b>sSATA</b>	<b>Connector</b>	(2) SATA-III, (1) Mini-SAS HD (4-ports)
		<b>Controller</b>	Intel® C621
		<b>Speed</b>	6.0 Gb/s
		<b>RAID</b>	RAID 0/1/10/5 (Intel RST) only for 4 SATA devices
	<b>M.2 connector</b>	(1) M.2 connector (2242/2260/2280) by PCI-E interface	
<b>Graphic</b>	<b>Connector type</b>	D-Sub 15-pin	
	<b>Resolution</b>	Up to 1920x1200	
	<b>Chipset</b>	Aspeed AST2500	
<b>Input /Output</b>	<b>USB</b>	(2) USB3.0 ports (2 at rear), (2) USB3.0 ports (2 at front)	
	<b>COM</b>	(1) DB-9 port (COM1)	
	<b>VGA</b>	(1) D-Sub 15-pin	
	<b>RJ-45</b>	(2) GbE ports, (1) PHY dedicated for IPMI	
<b>TPM (Optional)</b>	<b>TPM Support</b>	Please refer to our TPM supported list.	
<b>System Monitoring</b>	<b>Chipset</b>	Onboard Aspeed AST2500	
	<b>Voltage</b>	Monitors voltage for CPU, memory, chipset & power supply	
	<b>Temperature</b>	Monitors temperature for CPU & memory & system environment	
	<b>LED (On system front panel)</b>	Over temperature warning indicator, Fan & PSU fail LED indicator	
	<b>Others</b>	Watchdog timer support	
<b>Server Management</b>	<b>Onboard Chipset</b>	Onboard Aspeed AST2500	
	<b>AST2500 iKVM Feature</b>	IPMI 2.0 compliant baseboard management controller (BMC), Supports storage over IP and remote platform-flash, USB 2.0 virtual hub	
	<b>AST2500 IPMI Feature</b>	24-bit high quality video compression, 10/100/1000 Mb/s MAC interface	
<b>BIOS</b>	<b>Brand / ROM size</b>	AMI / 32MB	
	<b>Feature</b>	Hardware Monitor, SMBIOS 3.0/PnP/Wake on LAN, Boot from USB device/PXE via LAN/Storage, User Configurable FAN PWM Duty Cycle, Console Redirection, ACPI sleeping states S4,S5, ACPI 6.1	
<b>Operating System</b>	<b>OS supported list</b>	Please refer to our Intel OS supported list.	
<b>Regulation</b>	<b>FCC (DoC)</b>	Class A	
	<b>CE (DoC)</b>	Yes	
<b>Operating Environment</b>	<b>Operating Temp.</b>	10° C ~ 35° C (50° F~ 95° F)	
	<b>Non-operating Temp.</b>	- 40° C ~ 70° C (-40° F ~ 158° F)	
	<b>In/Non-operating Humidity</b>	90%, non-condensing at 35° C	
<b>RoHS</b>	<b>RoHS 6/6 Compliant</b>	Yes	

(Specifications are subject to change without notice. Items pictured may only be representative.)

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