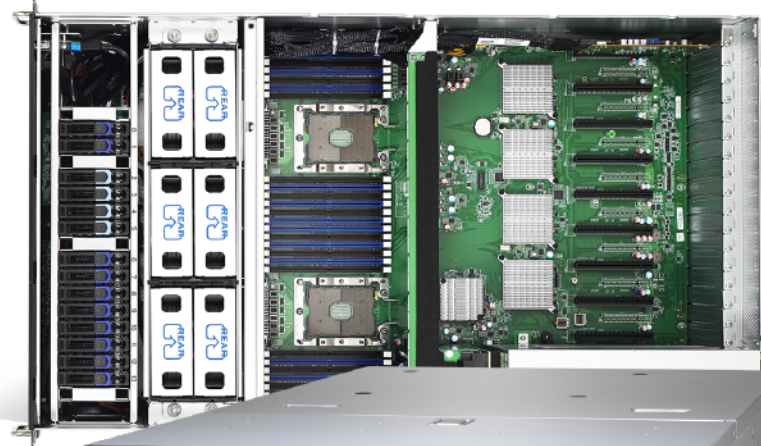


## 4U2S 8-GPGPU SERVER PLATFORM



## Thunder HX FT77D-B7109

B7109F77DV10E4HR-2T-N / B7109F77DV14HR-2T-N  
B7109F77DV4HR-2T-NF



### Front View



- Max up to (14) 2.5" Hot-Swap SSD/HDDs devices or (10) 2.5" Hot-Swap SSD/HDDs + (4) NVMe devices

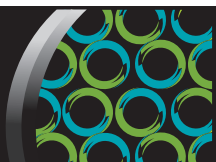
### Back View



- (2+1) 2,000 Watts (100-127Vac input)/ 3,200 Watts (200-240Vac input) RPSU, 80 PLUS Platinum

### 4U2S 8-GPU server platform designed for embarrassingly parallel workloads

- Max up to (14) 2.5" Hot-Swap SSD/HDDs devices or (10) 2.5" Hot-Swap SSD/HDDs + (4) NVMe devices
- Dual LGA3647 socket supports (2) Intel® Xeon® Scalable Processor Family (Socket-F support only for -NF SKU)
- (12+12) DIMM slots DDR4 RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 2666
- Supporting up to 768GB RDIMM/ 1,536GB LRDIMM/ 3,072GB RDIMM 3DS/LRDIMM 3DS  
\*Follow latest Intel DDR4 Memory POR
- (9) PCI-E Gen3 x16 slots  
(2) PCI-E Gen3 x8 slots (one for Tyan OCP riser card only)
- (2) 10GbE ports + (1) PHY port (via Intel® X550-AT2 + via Realtek® RTL8211E)
- Onboard BMC w/ IPMI and iKVM support
- (2+1) 2,000 Watts (100-127Vac input)/3,200 Watts (200-240Vac input) RPSU, 80 PLUS Platinum

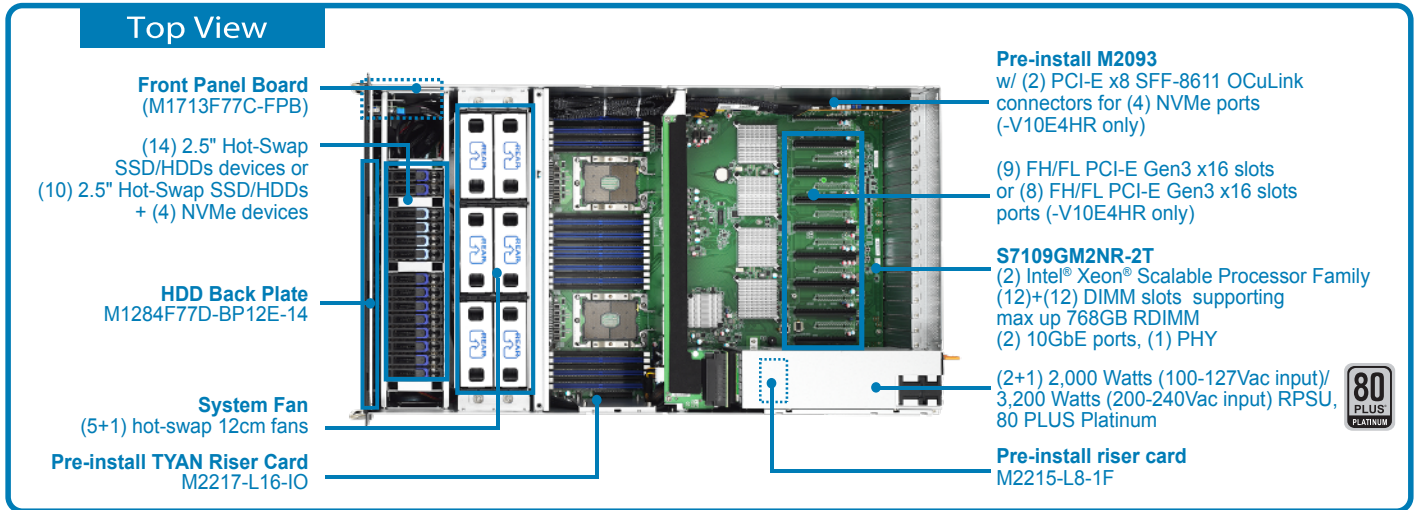


# Thunder HX FT77D-B7109

B7109F77DV10E4HR-2T-N / B7109F77DV14HR-2T-N  
B7109F77DV4HR-2T-NF

# TYAN

## Specifications



System	<b>Form Factor</b>	4U Rackmount
	<b>Chassis Name</b>	FT77D
	<b>Dimension (D x W x H)</b>	30.31" x 17.24" x 6.93" (770 x 438 x 176mm)
	<b>Motherboard</b>	S7109GM2NR-2T
	<b>Gross Weight</b>	45 kg (99.5 lbs)
Front Panel	<b>Buttons</b>	(1) RST, (1) ID, (1) PWR w/ LED
	<b>LEDs</b>	(1) HDD, (1) ID, (3) LAN, (1) IPMI/Warning
	<b>I/O Ports</b>	(2) USB 3.0 ports
Internal Drive Bay	<b>Type / Q'ty</b>	2.5" Hot-Swap SSD/HDDs/ (14) or 2.5" Hot-Swap SSD/HDD + NVMe/ (10) + (4)
	<b>HDD backplane support</b>	SAS 12Gb/s, SATA 6Gb/s, NVMe or SAS 12Gb/s, SATA 6Gb/s
	<b>Supported HDD Interface</b>	(14) SATA 6Gb/s or (10) SATA 6Gb/s + (4) NVMe
System Cooling Configuration	<b>FAN</b>	(5+1) hot-swap 12cm fans
Power Supply	<b>Type</b>	RPSU
	<b>Input Range</b>	AC 100-127V/12.9A , AC 200-240V/9.5A
	<b>Efficiency</b>	80-PLUS Platinum
	<b>Output Watts</b>	2,000 Watts (100-127Vac input) / 3,200Watts (200-240Vac input)
Processor	<b>Redundancy</b>	2+1
	<b>Supported CPU Series</b>	(2) Intel® Xeon® Scalable Processor Family (Socket-F support only for -NF SKU)
	<b>Thermal Design Power (TDP) wattage</b>	Max up to 205W
Chipset	<b>Chipset</b>	Intel® C621
	<b>Switch IC</b>	(4) PLX PEX8747
Memory	<b>Supported DIMM Qty</b>	(12)+(12) DIMM slots
	<b>DIMM Type / Speed</b>	DDR4 RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS 2666
	<b>Capacity</b>	Up to 768GB RDIMM/ 1.536GB LRDIMM/ 3,072GB RDIMM 3DS/LRDIMM 3DS *Follow latest Intel® DDR4 Memory POR
	<b>Memory channel</b>	6 Channels
Expansion Slots	<b>Memory voltage</b>	1.2V
	<b>PCI-E</b>	(9) PCI-E Gen3 x16 slots or (8) PCI-E Gen3 x16 slots (-V10E4HR only) (2) PCI-E Gen3 x8 slots (one for Tyan OCP riser card only)
	<b>Pre-install TYAN Riser Card</b>	M2215-L8-1F / M2217-L16-IO
	<b>Pre-install TYAN Mezz Card</b>	M2093 w/ (2) PCI-E x8 SFF-8611 OcuLink connectors for (4) NVMe ports (-V10E4HR only)
	<b>Others</b>	-
LAN	<b>Port Q'ty</b>	(2) 10GbE ports, (1) PHY
	<b>Controller</b>	Intel® X550-AT2
	<b>PHY Controller</b>	Realtek® RTL8211E

Storage	SATA	<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)
sSATA	sSATA	<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)
M.2 connector	M.2 connector	<b>Connector type</b>	D-Sub 15-pin
		<b>Resolution</b>	Up to 1920x1200
		<b>Chipset</b>	Aspeed AST2500
Input /Output	Input /Output	<b>USB</b>	(2) USB3.0 ports (at front)
		<b>COM</b>	(1) DB-9 COM port (at front)
		<b>VGA</b>	(1) D-Sub 15-pin (at front)
		<b>RJ-45</b>	(2) 10GbE ports, (1) PHY dedicated for IPMI
TPM (Optional)	TPM Support	<b>TPM Support</b>	Please refer to our TPM supported list.
		<b>Chipset</b>	Onboard Aspeed AST2500
System Monitoring	System Monitoring	<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
Server Management	Server Management	<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
BIOS	BIOS	<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
Operating System	<b>OS supported list</b>	Please refer to our AVL support lists	
Regulation	Regulation	<b>FCC (DoC)</b>	Class A
		<b>CE (DoC)</b>	Yes
Operating Environment	Operating Environment	<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
RoHS	<b>RoHS 6/6 Complaint</b>	Yes	

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

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