

## DUAL-SOCKET 8GPGPU PLATFORM



## FT77A-B7059

B7059F77AV6R-2T / B7059F77AV6R  
B7059F77AV4R-LE / B7059F77AV4R-LE

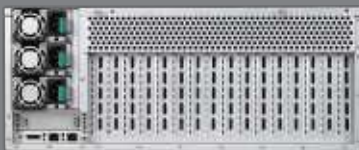


### Front View



(6) Internal 2.5" HDDs or (4) Internal 3.5" HDDs

### Back View



(8) PCI-E Gen.3 x16 slots  
(1) PCI-E Gen.3 x8 slot for mezzanine card (underneath PSUs)  
(2+1) 2,400W RPSU @ 220Vac

### 4U Dual-Socket Server Implementation for GPGPU and HPC Applications

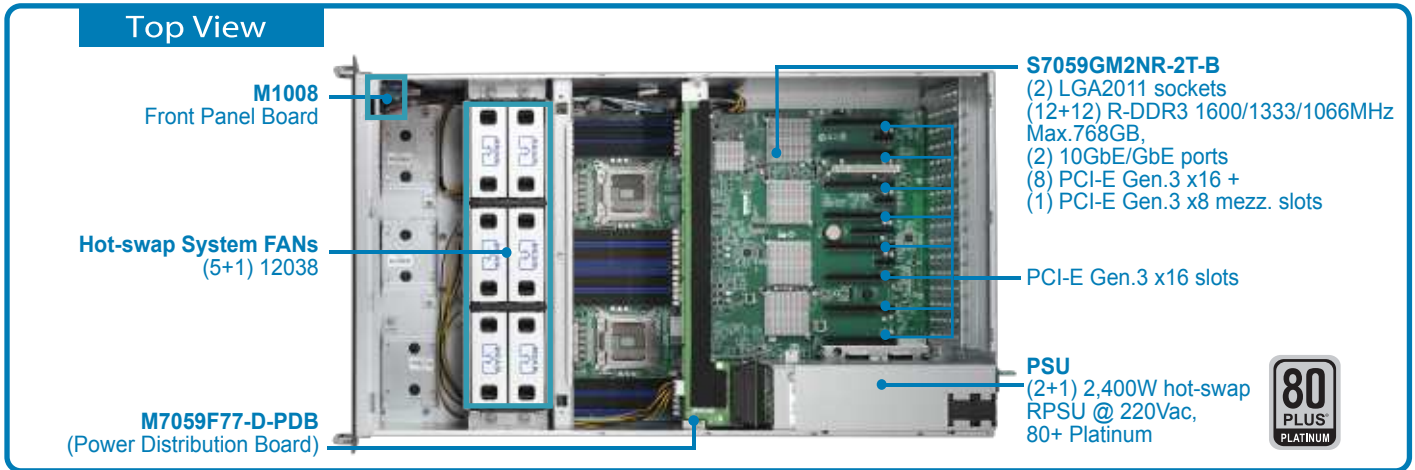
- Dual LGA2011 socket supports (2) E5-2600/E5-2600 v2 series CPU
- Intel® C602 PCH
- (12+12) 240-pin DDR3 DIMM slots  
(12) 240-pin DDR3 DIMM slots(-LE SKU)  
Supporting up to 768GB LRDIMM 1866/1600/1333/1066 memory  
Supporting up to 384GB R-DDR3 1866/1600/1333/1066 memory  
Supporting up to 192GB U-DDR3 1866/1333/1066 memory
- (8) Full-Height/ Full-Length PCI-E Gen3 x16 slots support (8) Double-deck GPU adapters
- (4) Full-Height/ Full-Length PCI-E Gen3 x16 slots support (4) Double-deck GPU adapters (-LE SKU)
- (2) Full-Height/ Full-Length PCI-E Gen3 x8 slots (one for mezzanine card)
- (1) Full-Height/ Full-Length PCI-E Gen3 x8 slots(-LE SKU)
- (3) Full-Height/ Full-Length PCI-E Gen2 x1 slots
- (1) Full-Height/ Full-Length PCI slot
- (4) Mini-SAS (4-ports) + (2) SATA-III connectors w/ RAID 0, 1, 10, 5 support
- (2) GbE (via Intel® I350-BT2, 1 port shared with IPMI) or
- (2) 10GbE (via Intel® X540-AT2, 1 port shared with IPMI) (-2T SKU)
- Onboard BMC w/ IPMI and iKVM support
- (2+1) Redundant, hot-swap RPSU high-efficiency 2,400W PSU , 80-PLUS Platinum  
(1+1) Redundant, hot-swap RPSU high-efficiency 1,000W/1,200W PSU , 80-PLUS Platinum(-LE SKU)

# FT77A-B7059

B7059F77AV6R-2T/B7059F77AV6R  
B7059F77AV4R-LE



## Specifications



<b>System (Recommend Chassis)</b>	<b>Form Factor</b>	4U Rackmount
	<b>Chassis Name</b>	FT77A
	<b>Dimension (H x W x D)</b>	30.31" x 17.24" x 6.93" (770 x 438 x 176mm)
	<b>Motherboard</b>	S7059GM2NR-2T / S7059GM2NR / S7059GM2NR-LE
<b>Front Panel</b>	<b>Buttons</b>	(1) RST / (1) ID / (1) PWR w/ LED
	<b>LEDs</b>	(1) HDD / (2) LAN / (1) ID / (1) IPMI/Warning
	<b>I/O Ports</b>	(2) USB ports
<b>External Drive Bay</b>	<b>Type / Q'ty</b>	2.5" HDDs / (6) or 3.5" HDDs/ (4) 3.5" HDDs(-LE SKU)
	<b>Supported HDD Interface</b>	(2) SATA 6Gb/s / (4) SATA 3Gb/s
<b>System Cooling Configuration</b>	<b>FAN</b>	(5+1) hot-swap 12cm fans
<b>Power Supply</b>	<b>Type</b>	RPSU hot-swap
	<b>Redundancy</b>	2+1 / 1+1(-LE SKU)
	<b>Output Watts</b>	2400 Watts 1,000 Watts/ 1,200 Watts(-LE SKU)
	<b>Efficiency</b>	80 plus Platinum
<b>Processor</b>	<b>Supported CPU Series</b>	Intel® Xeon® Processor E5-2600/E5-2600 v2 series processors
	<b>Socket Type / Q'ty</b>	LGA2011/ (2)
	<b>Thermal Design Power (TDP) wattage</b>	Up to 150W Up to 135W(-LE SKU)
	<b>System Bus</b>	Up to 8.0/ 7.2/ 6.4 GT/s with Intel QuickPath Interconnect (QPI) support
<b>Chipset</b>	<b>Chipset</b>	Intel® C602
	<b>Super I/O</b>	-
<b>Memory</b>	<b>Supported DIMM Qty</b>	(12)+(12) DIMM slots (12) DIMM slots(-LE SKU)
	<b>DIMM Type / Speed</b>	LRDIMM1866/1333/1066 memory R-DDR3 1866/1600/1333/1066 memory U-DDR3 1866/1333/1066 memory
	<b>Capacity</b>	up to 192GB UDIMM / 384GB RDIMM / 768GB LRDIMM
	<b>Memory channel</b>	4 Channels per CPU
	<b>Memory voltage</b>	1.5V/ 1.35V
	<b>Expansion Slots</b>	<b>PCI-E</b>
	<b>PCI-E (-LE SKU)</b>	(1) PCI-E x8 Gen.3 slot / (4) PCI-E Gen.3 x16 slot
	<b>Recommended TYAN Riser Card</b>	M7059F77-QDR-2, Dual QSFP 1B mezzanine card (40Gb/s) M7059F77-FDR-2, Dual QSFP 1B mezzanine card (56Gb/s)
	<b>PCI</b>	(1) PCI 32-bit slot

<b>LAN</b>	<b>Port Q'ty</b>	(2) GbE (1port shared with IPMI) (2) 10GbE (1port shared with IPMI) (-2T SKU)
	<b>Controller</b>	Intel® I350-BT2 Intel® X540-AT2 (B7059F77AV6R-2T SKU)
<b>Storage</b>	<b>Connector</b>	(1) Mini-SAS (4-ports) + (2) SATA (totally support 6 ports)
	<b>SATA</b>	<b>Controller</b> Intel® C602 series <b>Speed</b> (2) 6.0 Gb/s, (4) 3.0 Gb/s <b>RAD</b> RAID 0/1/10/5 (Intel RST)
	<b>Graphic</b>	<b>Connector type</b> D-Sub 15-pin <b>Resolution</b> up to 1920 x 1200 <b>Chipset</b> Aspeed AST2300
<b>Input / Output</b>	<b>USB</b>	(2) ports (via a dongle cable)
	<b>VGA</b>	(1) D-Sub 15-pin port (via a dongle cable)
	<b>RJ-45</b>	(2) GbE (1port shared with IPMI) (2) 10GbE (1port shared with IPMI) (-2T SKU)
<b>System Monitoring</b>	<b>Chipset</b>	Aspeed AST2300
	<b>Voltage</b>	Monitors voltage for CPU, memory, chipset & power supply
	<b>Temperature</b>	Monitors temperature for CPU & memory
	<b>LED (On system front panel)</b>	Fan fail LED indicator / Over temperature warning indicator / Fan & PSU fail LED indicator
<b>Server Management</b>	<b>Temperature</b>	Watchdog timer support
	<b>Onboard Chipset</b>	Onboard Aspeed AST2300
	<b>AST2300 IPMI Feature</b>	IPMI 2.0 compliant baseboard management controller (BMC) / Supports storage over IP and remote platform-flash / USB 2.0 v virtual hub
<b>BIOS</b>	<b>AST2300 iKVM Feature</b>	24-bit high quality video compression / 10/100 Mb/s MAC interface
	<b>Brand / ROM size</b>	AMI / 8MB
<b>Regulation</b>	<b>Feature</b>	Plug and Play (PnP) /PCI.2.3 /WfM2.0 /SMBIOS.2.3 /PXE boot / ACPI 2.0 power management /Power on mode after power recovery / User-configurable H/W monitoring / Auto-configurable of hard disk types
	<b>FCC (DoC)</b>	Class A
<b>Operating Environment</b>	<b>CE (DoC)</b>	Yes
	<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>RoHS</b>	<b>In/Non-operating Humidity</b>	90%, non-condensing at 35° C
	<b>RoHS 6/6 Compliant</b>	Yes

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

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