

DUAL-SOCKET HPC PLATFORM



GN70-B7056

B7056G70V8HR / B7056G70W8HR /
B7056G70W8HR-2T



■ Front View



(8) Hot-Swap 3.5" SATA-II/ SAS HDDs

■ Back View



(4) FH/FL PCI-E (G3) x8 slots +
(2) FH/HL PCI-E (G3) x8 slots

High-end dual-socket server platform for
HPC and enterprise virtualization
applications

- Dual LGA2011 socket supports Intel® Xeon® Processor E5-2600/E5-2600 v2 Series CPU
- Intel® C602 PCH and INTEL SAS ROM key design
- (8+8) 240-pin UDIMM/RDIMM/LRDIMM ECC 1066/1333/1600/1866
*Speed 1866 only for 1 slot per channel 1.5V(Blue color DIMM slot)
- up to (6) PCI-E Gen3 slots by riser
- (4) SATA-II connectors w/ RAID 0, 1, 10, 5 support
- (2) SATA-III connectors
- (8) SAS/SATA 3G ports(SCU)enabled by option ROM kit
- (3) GbE (via Intel® I350-BT2 + Intel® 82574L), or (2) 10GbE (via Intel® X540-AT2) + (1) GbE (Intel® 82574L) (-2T SKU)
- (7) USB2.0 ports (2 at rear, 4 via cable, 1 type A onboard)
- EATX (12" x 13", 305mm x 330mm)



GN70-B7056

B7056G70V8HR / B7056G70W8HR /
B7056G70W8HR-2T

TYAN
Specifications

Top View

Hot-swap System FANs

(4) 6038
(8) 6038 are required for
GPU deployment

M1245G70-BP6-8

8-port SAS 6G/SATA-II
HDD backplane board

M1709G70-FPB

Front Panel Board

M1601T70-D-PDB

Power Distribution Board

M7056-L24-3F

(1) FH/FL PCI-E G3 x16 slot (x16/x8)
+ (1) FH/FL PCI-E G3 x8 slot (x0/x8)
+ (1) FH/HL PCI-E G3 x8 slot

M7056-R24-3F

(1) FH/FL PCI-E G3 x8 slot (x0/x8)
+ (1) FH/FL PCI-E G3 x16 slot (x16/x8)
+ (1) FH/HL PCI-E G3 x8 slot

S7056GM3NR

(2) LGA2011 sockets
(16) R-DDR3 1600/1333/1066MHz
(3) GbE ports

(2) ERP1U 770W/ 700W PSUs
80-PLUS Gold (different SKUs)



System (Recommend Chassis)	Form Factor	2U Rackmount
	Chassis Name	GN70
	Dimension (H x W x D)	3.43" x 16.93" x 27.56" (87 x 430 x 700mm)
	Motherboard	S7056GM3NR / S7056WGM3NR / S7056WGM3NR-2T
Front Panel	Gross Weight	26KG
	Buttons	(1) PWR (w/ LED) / (1) RST / (1) NMI / (1) ID
	LEDs	(1) ID / (1) Warning / (1) Reserved (3) LAN
	I/O Ports	(2) USB ports
External Drive Bay	Type / Q'ty	3.5" Hot-Swap / (8)
	Supported HDD Interface	8-bay for 3.5"HDD ,6Gb/s mini-SAS backplane
System Cooling Configuration	FAN	up to (8) 6cm hot-swap fans (Default 4 hot- sawp FANs)
	Type	ERP1U
Power Supply	Input Range	Full-range AC(100-240V)
	Frequency	47 - 63 Hertz
	Output Watts	770 Watts
	Efficiency	PFC / 80-PLUS Gold
Processor	Supported CPU Series	Intel® Xeon® Processor E5-2600/E5-2600 v2
	Socket Type / Q'ty	Socket R (2)
	Average CPU Power (ACP) wattage	Up to 130W*
	System Bus	QPI link upto 8GT/s
Chipset	Chipset	Intel® C602
	Super I/O	-
Memory	Supported DIMM Qty	(8+8) DIMM slots
	DIMM Type / Speed	UDIMM/RDIMM/LRDIMM ECC 1066/1333/ 1600/1866 *Speed 1866 only for 1 slot per channel 1.5V (Blue color DIMM slot)
	Capacity	up to 128GB UDIMM / 512GB RDIMM / 512GB LRDIMM
	Memory channel	4 Channels per CPU
	Memory voltage	1.5V/ 1.35V
Expansion Slots	PCI-E	up to (6) PCI-E x8 slots by Riser Card
	Recommended TYAN® Riser Card	M7056-L24-3F, PCI-E x16 2U riser card (left) M7056-R24-3F, PCI-E x16 2U riser card (right)
LAN	Port Q'ty	(3) GbE ports
	Controller	Intel® 82574L + Intel® I350-BT2 Intel® 82574L + Intel® X540 (-2T SKU)

Storage	SAS (opt.)	Controller	Intel® Integrated RAID upgrade ROM 5 (-W SKU)
		Speed	3.0 Gb/s
	SATA	RAID	RAID 0/1/10
		Controller	Intel® C602 series
Graphic	Connector type	Speed	6.0 Gb/s
		RAID	RAID 0/1/10/5 (INTEL RAID stack)
		Resolution	up to 1920 x 1200
Input /Output	Chipset	Aspeed AST2300	
		USB	(7) USB2.0 ports (2 at rear, 4 via cable, 1 type A onboard)
		COM	(1) port (rear)
		VGA	(1) D-Sub 15-pin VGA port (2) SATA II connectors
System Monitoring	RJ-45	(3) GbE ports	
		Chipset	Nuvoton 83773G
		Voltage	Monitors voltage for CPU, memory, chipset & power supply
		Temperature	Monitors temperature for CPU & system environment
BIOS	LED (On system front panel)	Fan fail LED indicator Over temperature warning indicator	
		Temperature	Chassis intrusion detection Watchdog timer support
		Brand / ROM size	AMI / 8MB
		Feature	Plug and Play (PnP) /PCI2.3 /WfM2.0 /SMBIOS2.3 /PXE boot / ACPI 2.0 power management /Power on mode after power recovery / User-configurable H/W monitoring / Auto-configurable of hard disk types
Regulation	FCC (DoC) CE (DoC)	Class A Yes	
		Operating Temp.	10° C ~ 35° C (50° F~ 95° F)
Operating Environment	Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)	
		In/Non-operating Humidity	90%, non-condensing at 35° C
RoHS	RoHS 6/6 Complaint		Yes

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

MITAC INTERNATIONAL CORP.

TYAN Business Unit

USA
Tel: +1-510-651-8868
Fax: +1-510-651-7688

Taiwan
Tel: +886-2-2652-5888
Fax: +886-2-2652-5805

Japan
Tel: +81-3-3769-8311
Fax: +81-3-3769-8328

Europe
Sales: +32 2456 1721
Technical Support: +32 2456 1722

China
Shanghai Tel: +86-21-61431188 Ext 1366
China Tel: 86-010-62555015 Ext 8302