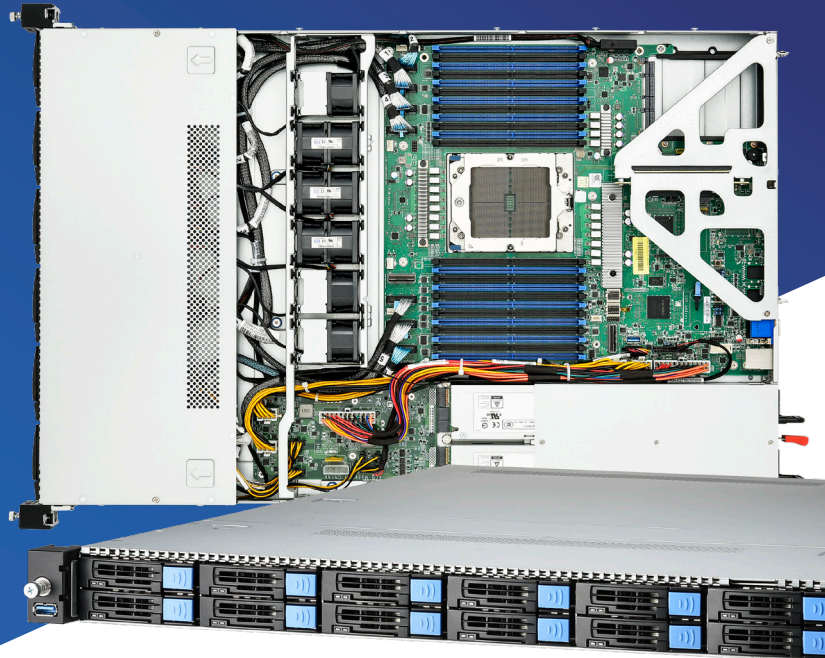


1U1S CLOUD SERVER

TYAN® GC68C-B8056

B8056G68CE12HR / B8056G68CE12HR-2T/
B8056G68CE12HR-2T-TU /
B8056G68CE12HR-2T-TU-HE



Front View



B8056G68CE12HR / B8056G68CE12HR-2T/
B8056G68CE12HR-2T-TU /
B8056G68CE12HR-2T-TU-HE
(12) NVMe U.2

Back View



(1+1) 860W Slim 1U 80+ Titanium

1U1S server platform for mainstream cloud applications

- Single Socket SP5
- (1) AMD EPYC™ 9004 / 9005 Series Processor
- (24) Support up to 6,144GB RDIMM/3DS RDIMM DDR5 4800 memory (non-TU sku)
- (24) Support up to 6,144GB RDIMM/3DS RDIMM DDR5 5200 memory (-TU sku)
- Up to (2) PCIe Gen.5 x16 slots via riser cards + (1) PCIe Gen.4 x16 OCP 3.0 mezzanine slot
- (1) IPMI ports or (2) 10GbE + (1) IPMI ports(-2T sku)
- Onboard BMC w/ IPMI and iKVM support
- (1+1) 860W Slim 1U, 80+ Titanium

Summary Table

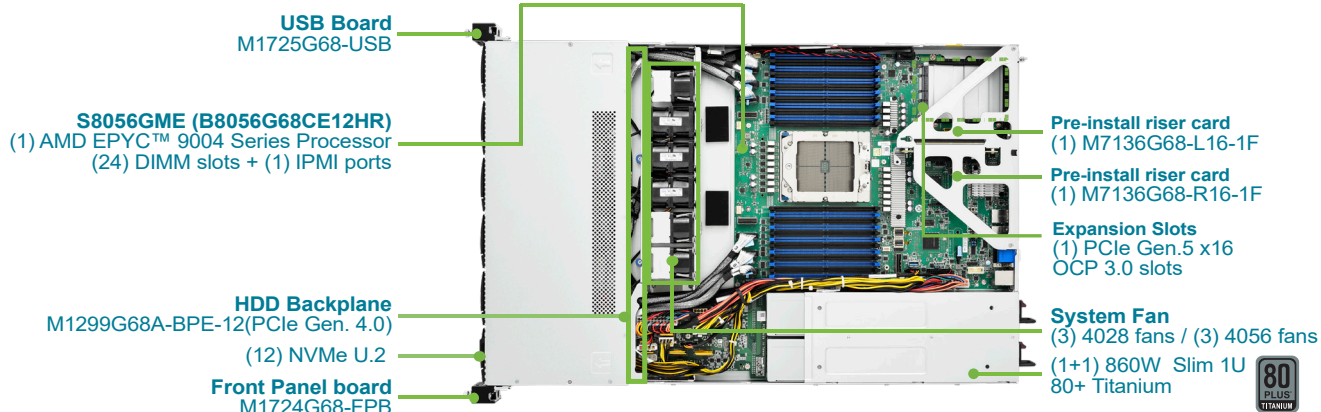
SKU	Motherboard	Storage
B8056G68CE12HR	S8056GME	(12) 2.5" hot-swap U.2
B8056G68CE12HR-2T	S8056GM2NE-2T	(12) 2.5" hot-swap U.2
B8056G68CE12HR-2T-TU	S8056GM2NE-2T-TU	(12) 2.5" hot-swap U.2
B8056G68CE12HR-2T-TU-HE	S8056GM2NE-2T-TU	(12) 2.5" hot-swap U.2 (PCIe Gen. 5)

TYAN® GC68C-B8056

B8056G68CE12HR



Top View



System	Form Factor	1U Rackmount
	Chassis Name	GC68C
	Dimension (D x W x H)	26.77" x 17.26" x 1.69" (680 x 438.5 x 43mm)
	Motherboard	S8056GME
Front Panel	Board Dimension	Prop. 14.18" x 12.16" (360.2 x 308.8mm)
	Buttons	(1) PWR w/ LED / (1) ID w/ LED
	LEDs	(1) ID / (1) PWR
External Drive Bay	I/O Ports	(1) USB 3.2 Gen.1 port
	Q'ty / Type	(12) 2.5" hot-swap NVMe HDD/SSDs
	Front Drive Bay Interface	(12) NVMe U.2
	Front HDD Backplane Support	SAS 12Gb/s /SATA 6Gb/s /NVMe
System Cooling Configuration	Notification	PCIe Gen. 4.0 NVMe support
	FAN	(3) 4028 fans / (3) 4056 fans
Power Supply	Air Duct	Tailored Air Duct
	Type	Slim 1U
	Input Range	AC 100~240V/12~6A
	Efficiency	80 plus Titanium
	Output Watts	860 Watts
Processor	Redundancy	1+1
	Serviceability	Hot-swap
	Q'ty / Socket Type	(1) AMD Socket SP5
	Supported CPU Series	(1) AMD EPYC™ 9004 Series Processor
Memory	Thermal Design Power (TDP) wattage	Max up to 400W* (cTDP)
	Supported DIMM Qty	(24) DIMM slots
	DIMM Type / Speed	AMD EPYC™ 9004: RDIMM: Up to 4800MHz (1DPC), 3600MHz (2DPC)
	Capacity	Up to 6,144GB RDIMM/3DS RDIMM DDR5 4800memory
Expansion Slots	Memory channel	12 Channels per CPU
	Memory voltage	1.1V
	PCI-E	(2) PCI-E Gen.5 x16 slot
LAN	Pre-installed TYAN Riser Card (PCIe Gen.5)	(1) M7136G68-L16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Left) / (1) M7136G68-R16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Right)
	Others:	(1) PCI-E Gen.5 x16 OCP 3.0 mezzanine slot
	Port Q'ty	(1) GbE dedicated for IPMI
	PHY Controller	Realtek RTL8211F

Storage	NVMe	Connector (M.2)	(2) 22110/2280 (by PCIe Gen.4 interface)
		Connector (U.2)	(6) SFF-TA-1016 (MCIO 8x) for (12) front NVMe
Graphic	Connector type	D-Sub 15-pin	
	Resolution	Up to 1920x1200	
Input /Output	Chipset	Aspeed AST2600	
	USB	(1) USB3.2 Gen.1 conn. (Type-A) / (1) USB3.2 Gen.1 header / (1) USB3.2 Gen.1 ports (@ front) / (2) USB3.2 Gen.1 ports (@ rear)	
	COM	(1) DB-9 COM port	
	VGA	(1) D-Sub 15-pin port	
TPM (Optional)	RJ-45	(1) GbE port dedicated for IPMI	
	Button	UID Button / Power Button	
	TPM Support	Please refer to our TPM supported list.	
System Monitoring	Interface	SPI	
	Chipset	Aspeed AST2600	
	Voltage	Monitors voltage for CPU, memory, chipset & power supply	
	Temperature	Monitors temperature for CPU & system environment	
Server Management	LED	Over temperature warning indicator / Fan & PSU fail LED indicator / Over v voltage warning indicator	
	Others	Watchdog timer support	
	Onboard Chipset	Onboard Aspeed AST2600	
BIOS	AST2500 iKVM Feature	24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub	
	AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface	
Operating System	Brand / ROM size	AMI / 64MB	
	Feature	Hardware Monitor / FAN speed control automatic / Boot from USB device/PXE via LAN/Storage / Console Redirection / SMBIOS 3.3/PnP/Wake on LAN / ACPI 6.2 / ACPI sleeping states S0, S5	
Regulation	OS supported list	Please refer to our AVL support list	
	FCC (SDoC)	Class A	
	CE (DoC)	Class A	
	VCCI	Class A	
Operating Environment	RCM	Class A	
	CB/LVD	Yes	
RoHS	Operating Temp.	10° C ~ 35° C (50° F~ 95° F)	
	Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)	
	In/Non-operating Humidity	90%, non-condensing at 35° C	
	RoHS 6/6 Complaint	Yes	

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

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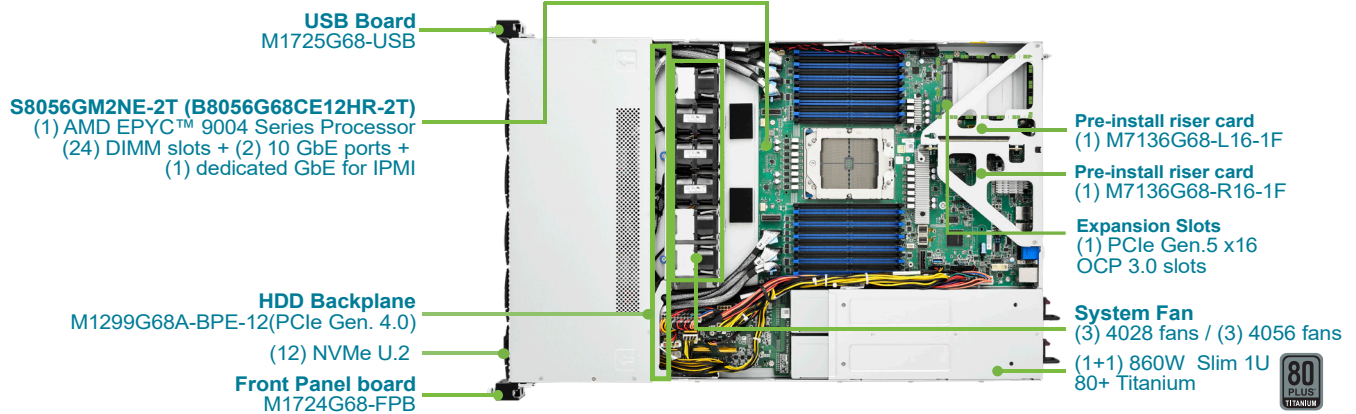
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TYAN® GC68C-B8056

B8056G68CE12HR-2T



Top View



System	Form Factor	1U Rackmount
	Chassis Name	GC68C
	Dimension (D x W x H)	26.77" x 17.26" x 1.69" (680 x 438.5 x 43mm)
Front Panel	Motherboard	S8056GM2NE-2T
	Board Dimension	Prop. 14.18" x 12.16" (360.2 x 308.8mm)
	Buttons	1) PWR w/ LED / (1) ID w/ LED
External Drive Bay	LEDs	(1) ID / (1) PWR
	I/O Ports	(1) USB 3.2 Gen. 1 port
	Q'ty / Type	(12) 2.5" hot-swap NVMe HDD/SSDs
System Cooling Configuration	Front HDD Backplane Support	SAS 12Gb/s / SATA 6Gb/s / NVMe
	Notification	PCIe Gen. 4.0 NVMe support
	Front HDD Backplane Support	NVMe
Power Supply	FAN	(3) 4028 fans / (3) 4056 fans
	Air Duct	Tailored Air Duct
	Type	Slim 1U
Processor	Input Range	AC 100~240V/12-6A
	Efficiency	80 plus Titanium
	Output Watts	860 Watts
Memory	Redundancy	1+1
	Serviceability	Hot-swap
	Q'ty / Socket Type	(1) AMD Socket SP5
Expansion Slots	Supported CPU Series	(1) AMD EPYC™ 9004 Series Processor
	Thermal Design Power (TDP) wattage	Max up to 400W* (cTDP)
	Supported DIMM Qty	(24) DIMM slots
LAN	DIMM Type / Speed	AMD EPYC™ 9004: RDIMM: Up to 4800MHz (1DPC), 3600MHz (2DPC)
	Capacity	Up to 6,144GB RDIMM/3DS RDIMM DDR5 4800memory
	Memory channel	12 Channels per CPU
Expansion Slots	Memory voltage	1.1V
	PCI-E	(2) PCI-E Gen.5 x16 slot
	Pre-installed TYAN Riser Card (PCIe Gen.5)	(1) M7136G68-L16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Left) / (1) M7136G68-R16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Right)
LAN	Others:	(1) PCI-E Gen.5 x16 OCP 3.0 mezzanine slot
	Port Q'ty	(2) 10GbE ports + (1) GbE dedicated for IPMI
	Controller	Intel X710-AT2
LAN	PHY Controller	Realtek RTL8211F

Storage	NVMe	Connector (M.2)	(2) 22110/2280 (by PCIe Gen.4 interface)
		Connector (U.2)	(6) SFF-TA-1016 (MCIO 8x) for (12) front NVMe
Graphic		Connector type	D-Sub 15-pin
		Resolution	Up to 1920x1200
Input /Output		Chipset	Aspeed AST2600
		USB	(1) USB3.2 Gen.1 conn. (Type-A) / (1) USB3.2 Gen.1 header / (1) USB3.2 Gen.1 ports (@ front) / (2) USB3.2 Gen.1 ports (@ rear)
		COM	(1) DB-9 COM port
TPM (Optional)		VGA	(1) D-Sub 15-pin port
		RJ-45	(2) 10 GbE ports + (1) dedicated GbE for IPMI
		Button	UID Button / Power Button
System Monitoring		TPM Support	Please refer to our TPM supported list.
		Interface	SPI
		Chipset	Aspeed AST2600
Server Management		Voltage	Monitors voltage for CPU, memory, chipset & power supply
		Temperature	Monitors temperature for CPU & system environment
		LED	Over temperature warning indicator / Fan & PSU fail LED indicator / Over voltage warning indicator
BIOS		Others	Watchdog timer support
		Onboard Chipset	Onboard Aspeed AST2600
		AST2500 iKVM Feature	24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub
Operating System		AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface
		Brand / ROM size	AMI / 64MB
Regulation		Feature	Hardware Monitor / FAN speed control automatic / Boot from USB device/PXE via LAN/Storage / Console Redirection / SMBIOS 3.3/PhP/Wake on LAN / ACPI 6.2 / ACPI sleeping states S0, S5
		OS supported list	Please refer to our AVL support list
		FCC (SDoC)	Class A
Operating Environment		CE (DoC)	Class A
		VCCI	Class A
		RCM	Class A
RoHS		CB/LVD	Yes
		Operating Temp.	10° C ~ 35° C (50° F ~ 95° F)
		Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)
	In/Non-operating Humidity	90%, non-condensing at 35° C	
	RoHS 6/6 Compliant	Yes	

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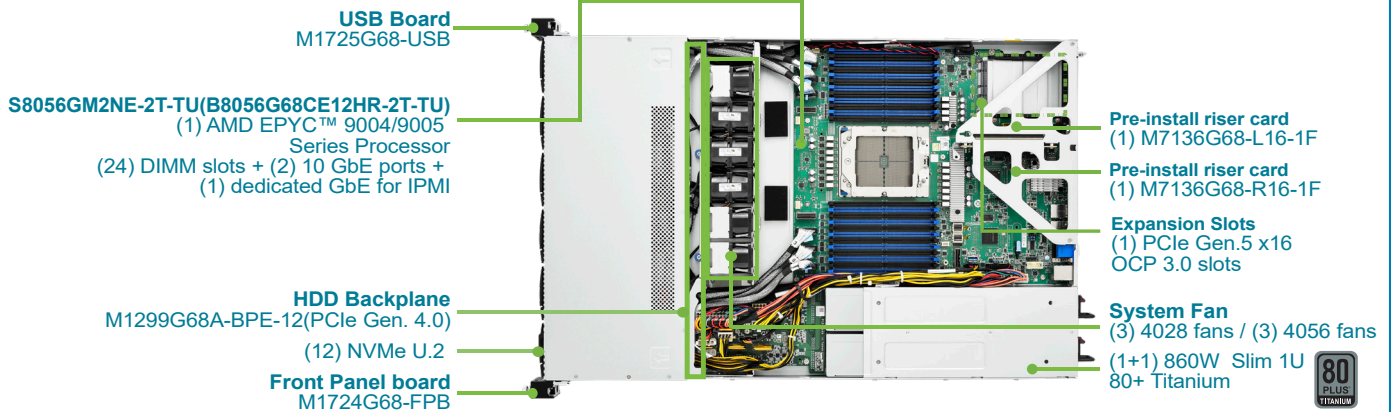
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TYAN® GC68C-B8056

B8056G68CE12HR-2T-TU



Top View



System	Form Factor	1U Rackmount
	Chassis Name	GC68C
	Dimension (D x W x H)	26.77" x 17.26" x 1.69" (680 x 438.5 x 43mm)
	Motherboard	S8056GM2NE-2T-TU
Front Panel	Board Dimension	Prop. 14.18" x 12.16" (360.2 x 308.8mm)
	Buttons	(1) PWR w/ LED / (1) ID w/ LED (1) ID / (1) PWR
	I/O Ports	(1) USB 3.2 Gen.1 port
External Drive Bay	Q'ty / Type	(12) 2.5" hot-swap NVMe HDD/SSDs
	Front Drive Bay Interface	(12) NVMe U.2
	Front HDD Backplane Support	NVMe
	Notification	PCIe 4.0 NVMe support only
System Cooling Configuration	FAN	(3) 4028 fans / (3) 4056 fans
	Air Duct	Tailored Air Duct
	Type	Slim 1U
Power Supply	Input Range	AC 100~240V/12~6A
	Efficiency	80 plus Titanium
	Output Watts	860 Watts
	Redundancy	1+1
	Serviceability	Hot-swap
Processor	Q'ty / Socket Type	(1) AMD Socket SP5 (1) AMD EPYC™ 9004 Series Processor / (1) AMD EPYC™ 9005 Series Processor
	Supported CPU Series	(1) AMD EPYC™ 9005: RDIMM: Up to 5200MHz (1DPC) RDIMM: Up to 4400MHz (1R 2DPC), 4000MHz (2R 2DPC) / AMD EPYC™ 9004: RDIMM: Up to 4800MHz (1DPC), 3600 MHz (2DPC)
	Thermal Design Power (TDP) wattage	Max up to 400W* (cTDP)
Memory	Supported DIMM Qty	(24) DIMM slots
	DIMM Type / Speed	AMD EPYC™ 9005: RDIMM: Up to 5200MHz (1DPC) RDIMM: Up to 4400MHz (1R 2DPC), 4000MHz (2R 2DPC) / AMD EPYC™ 9004: RDIMM: Up to 4800MHz (1DPC), 3600 MHz (2DPC)
	Capacity	Up to 6,144GB RDIMM/3DS RDIMM DDR5 5200 memory
	Memory channel	12 Channels per CPU
	Memory voltage	1.1V
Expansion Slots	PCI-E	(2) PCI-E Gen.5 x16 slot
	Pre-installed TYAN Riser Card (PCIe Gen.5)	(1) M7136G68-L16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Left) / (1) M7136G68-R16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Right)
	Others:	(1) PCI-E Gen.5 x16 OCP 3.0 mezzanine slot
LAN	Port Q'ty	(2) 10GbE ports + (1) GbE dedicated for IPMI
	Controller	Intel X710-AT2
	PHY Controller	Realtek RTL8211F

Storage	NVMe Connector (M.2)	(2) 22110/2280 (by PCIe Gen.4 interface)
	Connector (U.2)	(6) SFF-TA-1016 (MCIO 8x) for (12) front NVMe
Graphic	Connector type	D-Sub 15-pin
	Resolution	Up to 1920x1200
Input /Output	Chipset	Aspeed AST2600
	USB	(1) USB3.2 Gen.1 conn. (Type-A) / (1) USB3.2 Gen.1 header / (1) USB3.2 Gen.1 ports (@ front) / (2) USB3.2 Gen.1 ports (@ rear)
	COM	(1) DB-9 COM port
	VGA	(1) D-Sub 15-pin port
	RJ-45	(2) 10 GbE ports + (1) dedicated GbE for IPMI
TPM (Optional)	Button	UID Button / Power Button
	TPM Support Interface	Please refer to our TPM supported list. SPI
System Monitoring	Chipset	Aspeed AST2600
	Voltage	Monitors voltage for CPU, memory, chipset & power supply
	Temperature	Monitors temperature for CPU & system environment
	LED	Over temperature warning indicator / Fan & PSU fail LED indicator / Over voltage warning indicator
Server Management	Others	Watchdog timer support
	Onboard Chipset	Onboard Aspeed AST2600
	AST2500 iKVM Feature	24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub
BIOS	AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface
	Brand / ROM size	AMI / 64MB
Operating System	Feature	Hardware Monitor / FAN speed control automatic / Boot from USB device/PXE via LAN/Storage / Console Redirection / SMBIOS 3.3/PnP/Wake on LAN / ACPI 6.2 / ACPI sleeping states S0, S5
	OS supported list	Please refer to our AVL support list
Regulation	FCC (SDoC)	Class A
	CE (DoC)	Class A
	VCCI	Class A
	RCM	Class A
Operating Environment	CB/LVD	Yes
	Operating Temp.	10° C ~ 35° C (50° F ~ 95° F)
	Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)
RoHS	In/Non-operating Humidity	90%, non-condensing at 35° C
	RoHS 6/6 Complaint	Yes

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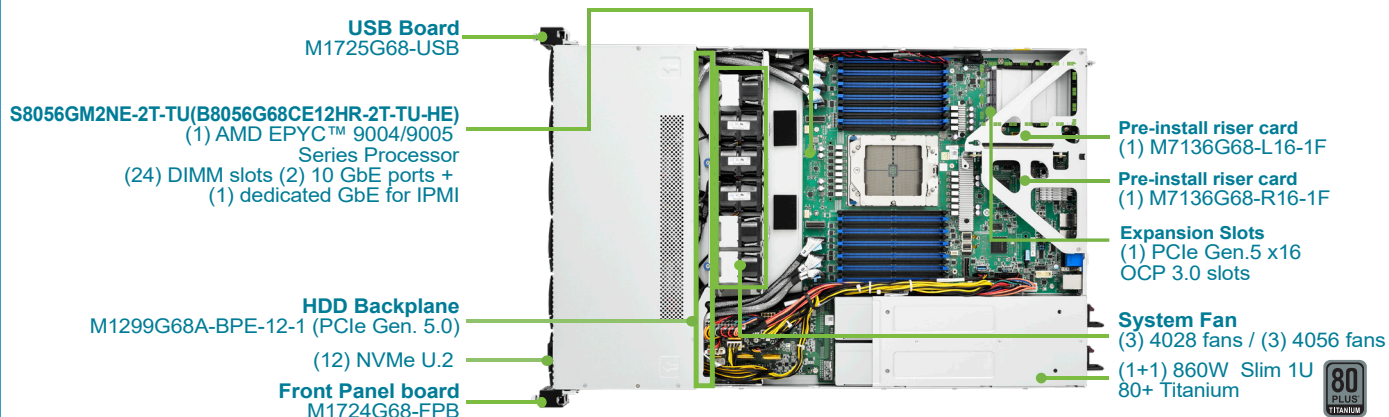
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TYAN® GC68C-B8056

B8056G68CE12HR-2T-TU-HE



Top View



System	Form Factor	1U Rackmount
	Chassis Name	GC68C
	Dimension (D x W x H)	26.77" x 17.26" x 1.69" (680 x 438.5 x 43mm)
Front Panel	Motherboard	S8056GM2NE-2T-TU
	Board Dimension	Prop. 14.18" x 12.16" (360.2 x 308.8mm)
	Buttons	(1) PWR w/ LED / (1) ID w/ LED
	LEDs	(1) ID / (1) PWR
External Drive Bay	I/O Ports	(1) USB 3.2 Gen.1 port
	Q'ty / Type	(12) 2.5" hot-swap NVMe HDD/SSDs
	Front Drive Bay Interface	(12) NVMe U.2
System Cooling Configuration	Front HDD Backplane Support	NVMe
	Notification	PCIe Gen. 5.0 NVMe support
	FAN	(3) 4028 fans / (3) 4056 fans
Power Supply	Air Duct	Tailored Air Duct
	Type	Slim 1U
	Input Range	AC 100~240V/12~6A
	Efficiency	80 plus Titanium
Processor	Output Watts	860 Watts
	Redundancy	1+1
	Serviceability	Hot-swap
	Q'ty / Socket Type	(1) AMD Socket SP5
Memory	Supported CPU Series	(1) AMD EPYC™ 9004 Series Processor / (1) AMD EPYC™ 9005 Series Processor
	Thermal Design Power (TDP) wattage	Max up to 400W* (cTDP)
	Supported DIMM Qty	(24) DIMM slots
	DIMM Type / Speed	AMD EPYC™ 9005: RDIMM: Up to 5200MHz (1DPC) RDIMM: Up to 4400MHz (1R 2DPC), 4000MHz (2R 2DPC) / AMD EPYC™ 9004: RDIMM: Up to 4800MHz (1DPC), 3600 MHz (2DPC)
	Capacity	Up to 6,144GB RDIMM/3DS RDIMM DDR5 5200 memory
Expansion Slots	Memory channel	12 Channels per CPU
	Memory voltage	1.1V
	PCI-E	(2) PCI-E Gen.5 x16 slot
	Pre-installed TYAN Riser Card (PCIe Gen.5)	(1) M7136G68-L16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Left) / (1) M7136G68-R16-1F riser card for (1) FH/HL PCIe Gen.5 x16 slot (Right)
LAN	Others:	(1) PCI-E Gen.5 x16 OCP 3.0 mezzanine slot
	Port Q'ty	(2) 10GbE ports + (1) GbE dedicated for IPMI
	Controller	Intel X710-AT2
	PHY Controller	Realtek RTL8211F

Storage	NVMe	Connector (M.2)	(2) 22110/2280 (by PCIe Gen.4 interface)
		Connector (U.2)	(6) SFF-TA-1016 (MCIO 8x) for (12) front NVMe
Graphic	Connector type	D-Sub 15-pin	
	Resolution	Up to 1920x1200	
	Chipset	Aspeed AST2600	
Input / Output	USB	(1) USB3.2 Gen.1 conn. (Type-A) / (1) USB3.2 Gen.1 header / (1) USB3.2 Gen.1 ports (@ front) / (2) USB3.2 Gen.1 ports (@ rear)	
	COM	(1) DB-9 COM port	
	VGA	(1) D-Sub 15-pin port	
	RJ-45	(2) 10 GbE ports + (1) dedicated GbE for IPMI	
	Button	UID Button / Power Button	
	TPM Support	Please refer to our TPM supported list.	
	Interface	SPI	
System Monitoring	Chipset	Aspeed AST2600	
	Voltage	Monitors voltage for CPU, memory, chipset & power supply	
	Temperature	Monitors temperature for CPU & system environment	
	LED	Over temperature warning indicator / Fan & PSU fail LED indicator / Over voltage warning indicator	
Server Management	Others	Watchdog timer support	
	Onboard Chipset	Onboard Aspeed AST2600	
	AST2500 iKVM Feature	24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub	
BIOS	AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface	
	Brand / ROM size	AMI / 64MB	
Operating System	Feature	Hardware Monitor / FAN speed control automatic / Boot from USB device/PXE via LAN/Storage / Console Redirection / SMBIOS 3.3/PnP/Wake on LAN / ACPI 6.2 / ACPI sleeping states S0, S5	
	OS supported list	Please refer to our AVL support list	
Regulation	FCC (SDoC)	Class A	
	CE (DoC)	Class A	
	VCCI		
	RCM	Class A	
Operating Environment	CB/LVD	Yes	
	Operating Temp.	10° C ~ 35° C (50° F ~ 95° F)	
	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 Compliant	YB37:E68es	

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