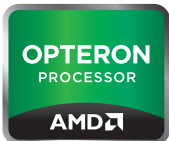


## HIGH-DENSITY 1U SERVER PLATFORM



# YR190-B8238-X2

B8238Y190X2-045V4HI (BTO) / B8238Y190X2-045V4H-LE (BTO)



### ■ Front View

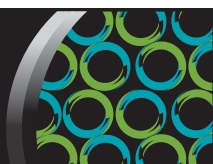


### ■ Back View



## High-Density 1U dual-socket SMP server implementation for HPC applications

- Dual G34 sockets support up to (2) AMD Opteron™ 6100/6200 series processors (Magny-Cours/Interlagos)
- Support (4) HyperTransport™ 3.0 link, max. bandwidth up to 25.6 GB/s @ 6.4GT/s per link
- AMD SR5670 + SP5100 (B8238Y190X2-045V4HI)
- AMD SR5650 + SP5100 (B8238Y190X2-045V4H-LE)
- (12) 240-pin DDR3 DIMM slots support up to 128GB R-DDR3 1333/1066/800MHz w/ ECC memory
- (1) HH/HL PCI-E (Gen.2) x16 slot
- (2) GbE LAN
- (1) QDR InfiniBand (B8238Y190X2-045V4HI)
- (4) Hot-swap 2.5" SATA-II HDDs w/ RAID 0, 1, 10, 5 support
- Onboard BMC w/ IPMI and iKVM support
- (1) ERP1U high-efficiency 450W PSU w/ PFC, 80-PLUS Silver Certified



# YR190-B8238-X2

B8238Y190X2-045V4HI (BTO) / B8238Y190X2-045V4H-LE (BTO)

**TYAN**  
Specifications

## Top View

**Easy-swap System FANs**  
(2) 4056 + (1) 4028

**M7018-BP-B8238-SG**  
4-port SAS/SATA-II  
HDD backplane board

**M5376-FPB**  
Integrated front panel board



ERP1U 450W PSU, 80-PLUS Silver



**M7018-R16-1L**  
Provide (1) low-profile  
PCI-E (Gen. 2) x16 slot

**S8238GM2NRI**  
(8+4) R-DDR3 1333/1066/800MHz  
Max.96GB  
(1) QSFP port, Legacy-free Rear I/O

System	<b>Form Factor</b>	1U Rackmount Frame w/ 2x 1U blades	Storage (per blade)	<b>SATA</b>	<b>Controller</b> Speed	AMD SP5100
	<b>Chassis Name</b>	YR190				
	<b>Dimension (H x W x D)</b>	1.72" x 17.32" x 28.74" (43.6 x 440 x 730mm)	Graphic (per blade)	<b>Connector type</b>		D-Sub 15-pin
	<b>Motherboard</b>	S8238GM2NRI S8238GM2NR-LE		<b>Resolution</b>	1600x1200@60Hz	
Front Panel (per blade)	<b>Gross Weight</b>	25 kg (w/ 2 blades installed)	Input / Output (per blade)	<b>Chipset</b>	Aspeed AST2050	
	<b>Buttons</b>	(1) RST / (1) ID / (1) PWR		<b>USB</b>	(5) USB2.0 ports (2 at rear, 2 at front, 1 type A onboard)	
	<b>LEDs</b>	(1) Power / (1) BMC / (2) LAN / (1) HDD		<b>COM</b>	(1) DB-9 port	
External Drive Bay (per blade)	<b>I/O Ports</b>	(2) USB ports	System Monitoring (per blade)	<b>VGA</b>	(1) D-Sub 15-pin VGA port	
	<b>Type / Q'ty</b>	2.5" Hot-Swap / (4)		<b>RJ-45</b>	(3) GbE ports	
System Cooling Configuration (per blade)	<b>Supported HDD Interface</b>	SAS 3.0Gb/s (via HBA) SATA-II 3.0Gb/s	Server Management (per blade)	<b>InfiniBand</b>	(1) QDR IB port	
	<b>FAN</b>	(3) 4cm fans		<b>Chipset</b>	Winbond W83795G	
Power Supply (per blade)	<b>Type</b>	ERP1U cold-swap	BIOS (per blade)	<b>Voltage</b>	Monitors voltage for CPU, memory, chipset & power supply	
	<b>Input Range</b>	Full-range AC(100-240V)		<b>Temperature</b>	Monitors temperature for CPU & system environment	
	<b>Frequency</b>	47 - 63 Hertz	Operating System	<b>LED (On system front panel)</b>	Fan fail LED indicator Over temperature warning indicator	
	<b>Output Watts</b>	450 Watts		<b>Others</b>	Watchdog timer support	
Processor (per blade)	<b>Efficiency</b>	PFC / 80-plus Silver	Expansion Slots (per blade)	<b>Onboard Chipset</b>	Onboard Aspeed AST2050	
	<b>Supported CPU Series</b>	AMD Opteron™ 6100/6200 series processors		<b>Feature</b>	<b>AST2050 IPMI Feature</b>	IPMI 2.0 compliant baseboard management controller (BMC) BIOS update USB 2.0 virtual hub
	<b>Socket Type / Q'ty</b>	G34 / (2)	<b>AST2050 iKVM Feature</b>		24-bit high quality video compression Dual 10/100 Mb/s MAC interfaces	
	<b>Average CPU Power (ACP) wattage</b>	Up to 65W	Memory (per blade)	<b>Brand / ROM size</b>	AMI / 4MB	
<b>System Bus</b>	Support (4) HyperTransport™ 3.0 link, max. bandwidth up to 25.6 GB/s @ 6.4GT/s per link	<b>OS supported list</b>		Please refer to our OS supported list.		
Chipset (per blade)	<b>Chipset</b>	AMD SR5670 + SP5100 (S8238GM2NRI) AMD SR5650 + SP5100 (S8238GM2NR-LE)	Regulation	<b>FCC (DoC)</b>	Class A	
	<b>Supported DIMM Qty</b>	(8+4) DIMM slots		<b>CE (DoC)</b>	Yes	
Memory (per blade)	<b>DIMM Type / Speed</b>	DDR3 1333/1066/800 RDIMM	Operating Environment	<b>Operating Temp.</b>	10° C ~ 35° C (50° F ~ 95° F)	
	<b>Capacity</b>	Up to 128GB RDIMM		<b>Non-operating Temp.</b>	- 40° C ~ 70° C (-40° F ~ 158° F)	
	<b>Memory channel</b>	8 Channels (4 Channels per CPU)	InfiniBand (per blade)	<b>In/Non-operating Humidity</b>	90%, non-condensing at 35° C	
<b>Memory voltage</b>	1.5V / 1.35V	<b>Controller</b>		Mellanox ConnectX®-2 MT25408A0-FCCR-QIS (B8238Y190X2-045V4HI)		
Expansion Slots (per blade)	<b>PCI-E</b>	(1) Low-Profile PCI-E Gen.2 x16 slot	<b>RoHS</b>	<b>RoHS 6/6 Compliant</b>	Yes	
	<b>Pre-installed TYAN Riser Card</b>	M7018-R16-1L, PCI-E x16 1U riser card (right)	(Specifications are subject to change without notice. Items pictured may only be representative.)			
LAN (per blade)	<b>Port Q'ty</b>	(2)				
	<b>Controller</b>	Intel® 82574L				

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