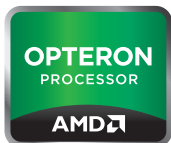


## HIGH-DENSITY 1U SERVER PLATFORM



# YR190-B8228-X2

B8228Y190X2-045V4H



### ■ Front View



### ■ Back View



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

- Dual C32 sockets support up to (2) AMD Opteron™ 4100/4200 series processors (Lisbon/Valencia)
- Support (2) HyperTransport™ 3.0 link, max. bandwidth up to 25.6 GB/s @ 6.4GT/s per link
- AMD SR5650 + SP5100
- (12) 240-pin DDR3 DIMM slots support up to 96GB R-DDR3 1333/1066/800MHz w/ ECC memory
- (1) HH/HL PCI-E (Gen.2) x16 slot
- (3) GbE LAN
- (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



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## Top View

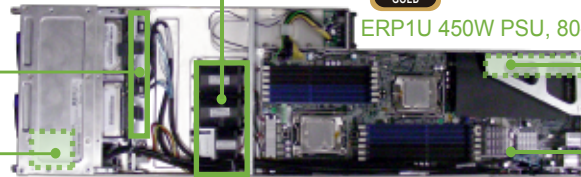
**Easy-swap System FANs**  
(2) 4056 + (1) 4028

**M7018-BP**  
BP4-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 Rear View

**S8228GM3NR**  
(2) C32 sockets  
(6+6) R-DDR3 1333/1066/800MHz  
Max.96GB, (3) GbEports,  
Legacy-free Rear I/O

System	<b>Form Factor</b>	1U Rackmount Frame w/ 2x 1U blades	Graphic (per blade)	<b>Connector type</b>	D-Sub 15-pin	
	<b>Chassis Name</b>	YR190		<b>Resolution</b>	1600x1200@60Hz	
	<b>Dimension (H x W x D)</b>	1.72" x 17.32" x 28.74" (43.6 x 440 x 730mm)		<b>Chipset</b>	Aspeed AST2050	
	<b>Motherboard</b>	S8228GM3NR		Input / Output (per blade)	<b>USB</b>	(5) USB2.0 ports (2 at rear, 2 at front, 1 type A onboard)
	<b>Gross Weight</b>	25 kg (w/ 2 blades installed)			<b>COM</b>	(1) DB-9 port
<b>Buttons</b>	(1) RST / (1) ID / (1) PWR	<b>VGA</b>	(1) D-Sub 15-pin VGA port			
Front Panel (per blade)	<b>LEDs</b>	(1) Power / (1) BMC / (2) LAN / (1) HDD	<b>RJ-45</b>	(3) GbE ports		
	<b>I/O Ports</b>	(2) USB ports	System Monitoring (per blade)	<b>Chipset</b>	Winbond W83795G	
	<b>Type / Q'ty</b>	2.5" Hot-Swap / (4)		<b>Voltage</b>	Monitors voltage for CPU, memory, chipset & power supply	
<b>Supported HDD Interface</b>	SAS 3.0Gb/s (via HBA) SATA-II 3.0Gb/s	<b>Temperature</b>		Monitors temperature for CPU & system environment		
<b>FAN</b>	(3) 4cm fans	<b>LED (On system front panel)</b>		Fan fail LED indicator Over temperature warning indicator		
<b>Others</b>	Watchdog timer support	Server Management (per blade)		<b>Onboard Chipset</b>	Onboard Aspeed AST2050	
<b>Type</b>	ERP1U cold-swap		<b>AST2050 IPMI Feature</b>	IPMI 2.0 compliant baseboard management controller (BMC) BIOS update USB 2.0 virtual hub		
<b>Input Range</b>	Full-range AC(100-240V)		<b>AST2050 iKVM Feature</b>	24-bit high quality video compression Dual 10/100 Mb/s MAC interfaces		
Power Supply (per blade)	<b>Frequency</b>	47 - 63 Hertz	BIOS (per blade)	<b>Brand / ROM size</b>	AMI / 4MB	
	<b>Output Watts</b>	450 Watts		<b>Feature</b>	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 Multiple boot options	
	<b>Efficiency</b>	PFC / 80-plus Silver			<b>OS supported list</b>	Please refer to our OS supported list.
Processor (per blade)	<b>Supported CPU Series</b>	AMD Opteron™ 4100/4200 series processors	Regulation	<b>FCC (DoC)</b>	Class A	
	<b>Socket Type / Q'ty</b>	C32 / (2)		<b>CE (DoC)</b>	Yes	
	<b>Average CPU Power (ACP) wattage</b>	Up to 50W	Operating Environment	<b>Operating Temp.</b>	10° C ~ 35° C (50° F~ 95° F)	
<b>System Bus</b>	Support (2) HyperTransport™ 3.0 link, max. bandwidth up to 25.6 GB/s @ 6.4GT/s per link	<b>Non-operating Temp.</b>		- 40° C ~ 70° C (-40° F ~ 158° F)		
<b>Chipset (per blade)</b>	<b>Chipset</b>	<b>In/Non-operating Humidity</b>		90%, non-condensing at 35° C		
Memory (per blade)	<b>Supported DIMM Qty</b>	(6+6) DIMM slots		<b>RoHS</b>	<b>RoHS 6/6 Compliant</b> Yes	
	<b>DIMM Type / Speed</b>	DDR3 1333/1066/800 RDIMM				
	<b>Capacity</b>	Up to <b>96GB</b> RDIMM				
	<b>Memory channel</b>	4 Channels (2 Channels per CPU)				
Expansion Slots (per blade)	<b>Memory voltage</b>	1.5V / 1.35V				
	<b>PCI-E</b>	(1) Low-Profile PCI-E Gen.2 x16 slot				
LAN (per blade)	<b>Pre-installed TYAN Riser Card</b>	M7018-R16-1L, PCI-E x16 1U riser card (right)				
	<b>Port Q'ty</b>	(3)				
Storage (per blade)	<b>Controller</b>	Intel® 82576EB Intel® 82574L				
	<b>SATA</b>	<b>Controller</b>	AMD SP5100			
		<b>Speed</b>	3.0 Gb/s			

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

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