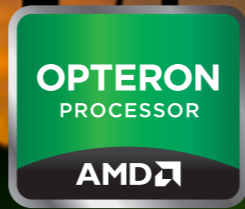


TYAN

AMD-BASED HPC/GPU PLATFORMS



<HPC> TYAN offers several High Performance Computing (HPC) servers based on the AMD Opteron 6200 Series platform. These HPC server platforms are designed for high performance computing in massively parallel computing environments which meet users' complex workloads requirements while accelerating general computing capability. Ranging from mainstream workloads to the most challenging computing applications, TYAN offers various platforms that support our customers need to build scalable, efficient, flexible, and easily managed datacenters as well as other complicated high performance computing infrastructure.

<GPU> Supporting the latest AMD Opteron™ 6200/4200 Series Processors and multiple Graphic Computing Processors (GPU), TYAN's GPU platforms offer data accuracy and double precision floating-point performance with uncompromised accuracy. TYAN's AMD processor based GPU platforms offer the use of up to 2 GPUs inside traditional 1U or 2U rackmount chassis, which help reduce the rack space requirements required for high performance applications. With the right workload, these platforms can offer higher performance and reduce power consumption when compared to traditional CPU centric platforms.

Target Applications:

- Bio-Informatics, Life Sciences and Computational Chemistry
- Electronic-Design Automation
- Computational Finance and Computational Fluid Dynamics
- Computer Vision and MATLAB Acceleration
- Data mining, Analytics and Databases
- Imaging, Molecular Dynamics, Weather, Climate Modeling and Atmospheric
- Oil, Gas and Petroleum Exploration
- Physic and Scientific Research

Featured AMD Opteron™ 6200 Series Processor

Server Board / Workstation Board

OPTERON PROCESSOR AMD 45nm
16 Core HT3 HyperTransport 3.0 DDR3

S8812

S8812WGM3NR

- Processor** • Quad G34 sockets support AMD Opteron™ 6200 series processors (Interlagos)
- Chipset** • AMD SR5690 + SP5100
- Memory** • (8+8+8+8) DDR-III DIMM slots
• Support up to 256GB of R-DDR3 1600/ 1333/1066/800 w/ ECC memory
• Support up to 128GB of U-DDR3 1333/1066 w/ ECC memory
- Expansion** • (1) PCI-E Gen.2 x16 slot (w/ x16 or x8 link)
• (1) PCI-E Gen.2 x8 slot (w/ x0 or x8 link)
• (2) PCI-E Gen.2 x8 slots
- Storage** • (1) SATA 3Gb/s port
• (8) SAS 6Gb/s ports by (2) mini-SAS connectors (LSI RAID stack)
- Network** • (3) GbE (via Intel® 82576EB and Intel® 82574L)
- Video** • ASPEED AST2050 Integrated graphics
- Management** • ASPEED AST2050 (IPMI v2.0 compliant w/ iKVM)
- Form Factor** • MEB (16.2" x 13", 411.48mm x 330mm)

Featured AMD Opteron™ 6200 Series Processor

Server Board / Workstation Board

OPTERON PROCESSOR AMD 45nm
16 Core HT3 HyperTransport 3.0 DDR3

S8232

S8232AGM4NRF / S8232WAGM4NRF / S8232GM4NR / S8232WGM4NR

- Processor** • Quad G34 sockets support AMD Opteron™ 6200 series processors (Interlagos)
- Chipset** • AMD SR5690 + SR5690 + SP5100
- Memory** • (12+12) DDR-III DIMM slots
• Support up to 256GB of R-DDR3 1333/1066/800 w/ ECC memory
• Support up to 64GB of U-DDR3 1333/1066 w/ ECC memory
- Expansion** • (4) PCI-E Gen.2 x16 slots
• (2) PCI-E Gen.2 x 8 slots (w/ x4 link)
• (1) PCI 32/33MHz slot
- Storage** • (6) SATA 3Gb/s connectors (Promise RAID stack)
• (8) SAS 6Gb/s ports by (2) mini-SAS connectors (LSI RAID stack)
- Network** • (4) GbE (via 2x Intel® 825876EB)
- Video** • ASPEED AST2050 Integrated graphics
- Audio** • Realtek ALC262 audio CODEC (S8232AGM4NRF/S8232WAGM4NRF)
- Firewire** • VIA VT6308P 1394a controller (S8232AGM4NRF/S8232WAGM4NRF)
- Management** • ASPEED AST2050 (IPMI v2.0 compliant w/ iKVM)
- Form Factor** • MEB (16.2" x 13", 411.48mm x 330mm)

AMD Opteron™ 6200 Series Processor

Server Board

OPTERON PROCESSOR AMD 45nm
16 Core HT3 HyperTransport 3.0 DDR3

S8236-IL

S8236GM3NR-IL / S8236WGM3NR-IL / S8236WGM3NR-HE-IL

- Processor** • Dual G34 sockets support AMD Opteron™ 6200 series processors (Interlagos)
- Chipset** • AMD SR5690 + SR5650 + SP5100 (S8236WGM3NR-HE-IL)
• AMD SR5690 + SP5100 (S8236GM3NR-IL/S8236WGM3NR-IL)
- Memory** • (8+8) DDR-III DIMM slots
• Support up to 256GB of R-DDR3 1600/1333/1066/800 w/ ECC memory
• Support up to 128GB of U-DDR3 1333/1066 w/ ECC memory
- Expansion** • (3) PCI-E Gen.2 x16 slots
- Storage** • (2) SATA 3Gb/s ports (Promise RAID stack)
• (4) SATA 3Gb/s ports by (1) mini-SAS connector (Promise RAID stack)
• (8) SAS 6Gb/s ports by (2) mini-SAS connectors (LSI RAID stack)
- Network** • (3) GbE (via Intel® 82576EB and Intel® 82574L)
- Video** • ASPEED AST2050 Integrated graphics
- Management** • ASPEED AST2050 (IPMI v2.0 compliant w/ iKVM)
- Form Factor** • EATX (12" x 13", 305mm x 330mm)

AMD Opteron™ 4200 Series Processor

Server Board

OPTERON PROCESSOR AMD 45nm
8 Core HT3 HyperTransport 3.0 DDR3

S8225

S8225AGM4NRF / S8225WAGM4NRF

- Processor** • Dual C32 sockets support AMD Opteron™ 4200 series processors (Valencia)
- Chipset** • AMD SR5690 + SR5690 + SP5100
- Memory** • (4+4) DDR-III DIMM slots
• Support up to 64GB of R-DDR3 1600/1333/1066/800 w/ ECC memory
• Support up to 32GB of U-DDR3 1333/1066 w/ ECC memory
- Expansion** • (4) PCI-E Gen.2 x16 slots
• (1) PCI-E Gen.2 x8 slot (x4 link)
• (1) PCI-E Gen.2 x4 slot
• (1) PCI 32/33MHz slot
- Storage** • (6) SATA 3Gb/s connectors (Promise RAID stack)
• (8) SAS 6Gb/s ports by (2) mini-SAS connectors (LSI RAID stack)
- Network** • (4) GbE (via 2x Intel® 825876EB)
- Video** • ASPEED AST2050 Integrated graphics
- Audio** • Realtek ALC262 audio CODEC
- Firewire** • VIA VT6308P 1394a controller
- Management** • ASPEED AST2050 (IPMI v2.0 compliant w/ iKVM)
- Form Factor** • EATX (12" x 13", 305mm x 330mm)



AMD Opteron™ 6200 Series Processor

FT48-B8812
B8812F48W8HR



Model Number	FT48-B8812		
Enclosure Form Factor	4U (27.5" in depth)		
Supported CPU	(4) AMD Opteron™ 6200 Series (Interlagos)		
Chipset	AMD SR5690 + SP5100		
Chipset Interconnection	HyperTransport™ Link 3.0		
Number of DIMM Slot	32/ 8+8+8+8		
Memory Type (max. capacity)	R-DDR3 1600/ 1333/1066/800 w/ ECC (256GB) U-DDR3 1333/1066 w/ ECC (128GB)		
Storage Controller	LSI SAS2008 (SAS 6Gb/s)		
RAID Support	0, 1, 1E, 10 (LSI RAID stack)		
Networking	(3) GbE (shared IPMI NIC)		
PCI Expansion Slots	(1) PCI-E (Gen.2) x16 (w/ x16 or x8 link) + (1) PCI-E (Gen.2) x8 (w/ x0 or x8 link) + (2) PCI-E (Gen.2) x8		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8812F48W8HR	(8) hot-swap 3.5"	(2) 4-port SAS/ SATA 6Gb/s	(2+1) 1,540W RPSU



AMD Opteron™ 6200 Series Processor

GN70-B8236-IL

B8236G70W8HR-HE-IL / B8236G70W8HR-HE-IL-N2275 (BTO)
B8236G70W8HR-HE-IL-N229 (BTO)



Model Number	GN70-B8236-HE-IL		
Enclosure Form Factor	2U (27.56" in depth)		
Supported CPU	(2) AMD Opteron™ 6200 Series (Interlagos)		
Chipset	AMD SR5690 + SR5650 + SP5100		
QuickPath Interconnect	HyperTransport™ Link 3.0		
Number of DIMM Slot	16/ 8+8		
Memory Type (max. capacity)	R-DDR3 1600/ 1333/ 1066/ 800 w/ ECC (256GB) U-DDR3 1333/1066 w/ ECC (128GB)		
Storage Controller	LSI SAS2008 (SAS 6Gb/s)		
RAID Support	0, 1, 1E, 10 (LSI RAID stack)		
Networking	(3) GbE (shared IPMI NIC)		
PCI Expansion Slots	(2) PCI-E (Gen.2) x16 + (2) PCI-E (Gen.2) x8		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8236G70W8HR-HE-IL	(8) hot-swap 3.5"	8-port SAS/ SATA 6Gb/s	(1+1) 770W RPSU
B8236G70W8HR-HE-IL-N2275 (BTO)	(8) hot-swap 3.5"	8-port SAS/ SATA 6Gb/s	1,540W (2x 770W)
B8236G70W8HR-HE-IL-N229 (BTO)	(8) hot-swap 3.5"	8-port SAS/ SATA 6Gb/s	1,540W (2x 770W)



AMD Opteron™ 6200 Series Processor

YR190-B8028-X2
B8028Y190X2-030V4H



Model Number	YR190-B8028-X2		
Enclosure Form Factor	1U (28.74" in depth) / 2 Nodes		
Supported CPU (per node)	(1) AMD Opteron™ 6200 Series (Interlagos)		
Chipset (per node)	AMD SR5650 + SP5100		
Chipset Interconnection (per node)	HyperTransport™ Link 3.0		
Number of DIMM Slot (per node)	12		
Memory Type (max. capacity) (per node)	R-DDR3 1333/1066/800 w/ ECC (192GB) U-DDR3 1333/1066 w/ ECC (96GB)		
Storage Controller (per node)	AMD SP5100 (SATA 3Gb/s)		
RAID Support (per node)	RAID 0, 1, 5, 10 (Promise RAID Stack)		
Networking (per node)	(3) GbE (shared IPMI NIC)		
PCI Expansion Slots (per node)	(1) PCI-E (Gen.2) x16		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8028Y190X2-030V4H	(4) Hot-swap 2.5" (per node)	4-port SAS/ SATA 3Gb/s (per node)	300W PSU (per node)



AMD Opteron™ 6200 Series Processor

YR190-B8238-X2
B8238Y190X2-045V4H



Model Number	YR190-B8238-X2		
Enclosure Form Factor	1U (28.74" in depth) / 2 Nodes		
Supported CPU (per node)	(2) AMD Opteron™ 6200 Series (Interlagos)		
Chipset (per node)	AMD SR5670 + SP5100		
Chipset Interconnection (per node)	HyperTransport™ Link 3.0		
Number of DIMM Slot (per node)	12/ 8+4		
Memory Type (max. capacity) (per node)	R-DDR3 1333/1066/800 w/ ECC (192GB) U-DDR3 1333/1066 w/ ECC (96GB)		
Storage Controller (per node)	AMD SP5100 (SATA 3Gb/s)		
RAID Support (per node)	RAID 0, 1, 5, 10 (Promise RAID Stack)		
Networking (per node)	(2) GbE (shared IPMI NIC) + (1) QDR IB		
PCI Expansion Slots (per node)	(1) PCI-E (Gen.2) x16		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8238Y190X2-045V4H	(4) Hot-swap 2.5" (per node)	4-port SAS/ SATA 3Gb/s (per node)	450W PSU (per node)
B8238Y190X2-045V4HI (BTO)	(4) Hot-swap 2.5" (per node)	4-port SAS/ SATA 3Gb/s (per node)	450W PSU (per node)



AMD Opteron™ 4200 Series Processor

YR190-B8228-X2
B8228Y190X2-045V4H



Model Number	YR190-B8228-X2		
Enclosure Form Factor	1U (28.74" in depth) / 2 Nodes		
Supported CPU (per node)	(1) AMD Opteron™ 4200 Series (Valencia)		
Chipset (per node)	AMD SR5650 + SP5100		
Chipset Interconnection (per node)	HyperTransport™ Link 3.0		
Number of DIMM Slot (per node)	12/ 6+6		
Memory Type (max. capacity) (per node)	R-DDR3 1333/1066/800 w/ ECC (192GB) U-DDR3 1333/1066 w/ ECC (96GB)		
Storage Controller (per node)	AMD SP5100 (SATA 3Gb/s)		
RAID Support (per node)	RAID 0, 1, 5, 10 (Promise RAID Stack)		
Networking (per node)	(3) GbE (shared IPMI NIC)		
PCI Expansion Slots (per node)	(1) PCI-E (Gen.2) x16		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8228Y190X2-045V4H	(4) Hot-swap 2.5" (per node)	4-port SAS/ SATA 3Gb/s	450W PSU (per node)



Model Number	YR190-B8228-X2		
Enclosure Form Factor	1U (28.74" in depth) / 2 Nodes		
Supported CPU (per node)	(1) AMD Opteron™ 4200 Series (Valencia)		
Chipset (per node)	AMD SR5650 + SP5100		
Chipset Interconnection (per node)	HyperTransport™ Link 3.0		
Number of DIMM Slot (per node)	12/ 6+6		
Memory Type (max. capacity) (per node)	R-DDR3 1333/1066/800 w/ ECC (192GB) U-DDR3 1333/1066 w/ ECC (96GB)		
Storage Controller (per node)	AMD SP5100 (SATA 3Gb/s)		
RAID Support (per node)	RAID 0, 1, 5, 10 (Promise RAID Stack)		
Networking (per node)	(3) GbE (shared IPMI NIC)		
PCI Expansion Slots (per node)	(1) PCI-E (Gen.2) x16		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B8228Y190X2-045V4H	(4) Hot-swap 2.5" (per node)	4-port SAS/ SATA 3Gb/s	450W PSU (per node)