

### MITAC INTERNATIONAL CORP. TYAN® Business Unit

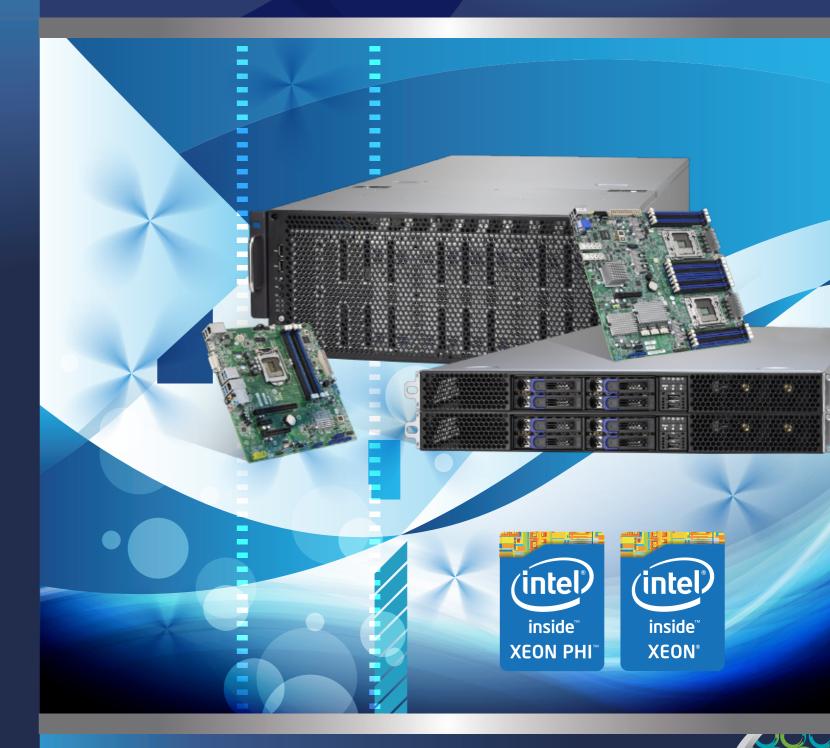
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## **Intel-Based Platforms**

Intel® Xeon® Processor E3-1200, E5-2600, E5-2600 v2, E5-2400 v2 Product Families and Intel<sup>®</sup> Core<sup>®</sup> i3/i5/i7 Processors Based Platforms



## Intel<sup>®</sup> Xeon Phi<sup>™</sup> Coprocessor

Power your breakthrough innovations with the highly parallel processing of the Intel® Xeon Phi™ coprocessor. Now you can think "reuse" rather than "recode" with x86 compatibility. Languages, tools, and applications run smoothly across the full spectrum of Intel® Xeon® family-based platforms. Plus, discover the flexibility of a coprocessor that can also host an OS.

- Large numbers of cores and threads enable efficient execution of hundreds of simultaneous tasks to dramatically boost aggregate performance for highly-parallel applications.
- Enables broad reuse of existing code. Also allows developers to use familiar tools and methods and to maintain a common code base for Intel® Xeon® processors and Intel® Xeon Phi™ coprocessors.
- Can operate as a dependent coprocessor or an independent server node to enable flexible usage models and optimized support for diverse hardware and software environments.
- Supports standard clustering models for simple integration into clustered environments.
- Provides exceptional compute density and energy efficiency.
- Enables simple scaling of highly-parallel execution resources to deliver desired performance levels.

### **Target Markets and Applications**

Life Sciences, Energy, 3D Design, Research and Weather.

### The Intel®Xeon Phi™ Coprocessor 5110P®

The Intel® Xeon Phi™ coprocessor 5110P, based on Intel® Many Integrated Core (MIC) architecture, complements the industry leading performance and energy-efficiency of the Intel® Xeon® processor E5 family to enable dramatic performance gains for some of today's most demanding applications. You can now achieve optimized performance for even your most highly-parallel technical computing workloads, while maintaining a unified hardware and software environment.





based on calculated theoretical peak double precision performance capability for a single coprocessor. 16 DP flops/clock/core \* 60 cores \* 1.053 GHz = 1.01088 Tflops ight © 2012 Intel Corporation. All rights reserved. Intel, the Intel logo, Xeon and Xeon Phi are trademarks of Intel Corporation in the U.S. and other countries.

## Intel® Xeon® processor E5-2600 Product Family

The Intel® Xeon® processor E5 family supports key cloud requirements that make your data center agile and more responsive to changing business needs. Maintaining industry leadership for power efficiency and continuing Intel® Xeon® processor performance advancements, the Intel® Xeon® processor E5 family gives you additional performance when you need it for single- and multi-threaded applications, including increased floating-point performance for technical computing workloads.

- Faster Performance for Peak Workloads
- Up to 2X Performance Gains
- Eliminating Network Bottlenecks
- Strengthening Security in the Enterprise and the Cloud
- Driving down Energy Cost at Every Level
- Optimized Platform Solutions

### **Target Markets and Applications**

Virtualization, Storage, HPC, Datacenter, IPDC and Public-Private Cloud Computing.

### Intel® Xeon® processor E5-2600 Product Family

Servers, workstations, and storage solutions based on the new Intel® Xeon® processor E5-2600 Product family deliver the best combination of performance, built-in capabilities, and cost-effectiveness to make data centers more flexible and efficient. From virtualization and cloud computing solutions to design automation or real-time financial transactions, you'll be delighted by better than ever performance no matter what tasks you face.



**XEON®** 

intel

inside™

1.Available on select Intel® Core™ processors. Requires an Intel® HT Technology-enabled system. Consult your PC manufacturer. Performance will vary depending on the specific hardware and software used. For more information including details on which processors support HT Technology, visit http://www.intel.com/info/hyperthreading.
2.Requires a system with Intel® Turbo Boost Technology, Intel turbo Boost Technology 2.0 are only available on select Intel® processors. Consult your PC manufacturer. Performance varies depending on hardware, software and system configuration. For more information, visit www.intel.com/go/furbo/. Copyright © 2012 Intel Corporation. All rights reserved. Intel, the Intel Iogo, and Xeon are traders of Intel Corporation in the U.S. and other countries.

# TYAN INTEL-BASED HPC/GPU PLATFORMS



<HPC> TYAN offers multiple High Performance Computing (HPC) server platforms that support either the newest Intel® Xeon® processor E5-2600/ E52600 v2 product family or Intel® Xeon® 5600 series processor. Both platforms are designed for high performance 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 Intel® Xeon® Processor E5-2600/ E52600 v2 product families, Intel® Xeon® 5600 Series Processor and Graphic Computing Processors (GPU), TYAN's GPU platforms offer data accuracy and double precision floating-point performance with uncompromised accuracy. TYAN's Intel Xeon based GPU platforms range from 1 GPU up to 8 GPUs inside traditional 1U, 2U and 4U 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.

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

**SMB Platforms** 

**HPC/GPU Platforms** 

Cloud Platforms



















## 4U High-density GPU Server Platform for GPGPU applications

Model Number		FT77A-B7059-LE	
Enclosure Form Factor		4U (30.31" in depth)	
Supported CPU	(1) Intel <sup>®</sup> Xeor	<sup>®</sup> E5-2600 v2 Series (Iv)	/ Bridge-EP)
Chipset	Intel® (	C602 PCH + (2) PLX PEX	8747
Interconnection	Int	el <sup>®</sup> QPI 8.0/ 7.2/ 6.4GT/s	3
Number of DIMM Slot		12	
Memory Type (max. capacity)	U-DR3 1866/1600/1333/ 1066 w/ ECC (384GB)  U-DR3 1866/1600/1333/ 1066 w/ ECC (192GB)  Intel® C602 PCH (SATA 6Gb/s & 3Gb/s)		
Storage Controller			
RAID Support			
Networking	(2	) GbE (shared IPMI NIC)	
PCI Expansion Slots	Slots (1) PCI-E x8 (Gen.3) slot + (4) PCI-E (Gen.3) x16 slot (3) PCI-E (Gen.2) slots + (1) PCI 32bit slot		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7059F77AV4R-LE(BTO)	(4) Internal 3.5"	N/A	(1+1) 1,000W/1,200W RPSU



















Model Number	FT68-B7910		
Enclosure Form Factor	4U (26.77" in depth)		
Supported CPU	(4) Intel® Xeon® E5-4600 v2 Series (Ivy Bridge-EP 4S)		
Chipset		Intel® C602 PCH	
QuickPath Interconnect Intel® QPI 8.0/ 7.2/ 6.4GT/s			
Number of DIMM Slot	32 / (8+8+8+8)		
	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (1024GB)		
Memory Type (max. capacity)	R-DDR3 1866/1600/1333/ 1066 w/ ECC (512GB)		
	U-DDR3 1866/1600/1333/ 1066 w/ ECC (256GB)		
Storage Controller	(2) LSI SAS2308 (SAS 6Gb/s)  RAID 0, 1, 1E, 10 (LSI Integrated RAID)  (2)10GbE + (1) IPMI  (6) PCI-E (Gen.3) x16 + (2) PCI-E (Gen.3) x8		
RAID Support			
Networking			
PCI Expansion Slots			
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7910F68W32HR-2T	(32) hot-swap 2.5"	32-port SAS/ SATA 6Gb/s	(1+1) 1600W RPSU
B7910F68W64HR-2T	(64) hot-swap 2.5"	64-port SAS/ SATA 6Gb/s	(1+1) 1600W RPSU















GN70-B7056 B7056G70V8HR / B7056G70W8HR















## 4U High-density GPU Server Platform for GPGPU applications

Model Number	FT77B-B7059 4U (30.31" in depth)		
Enclosure Form Factor			
Supported CPU	(2) Intel® Xe	eon® E5-2600 v 2 Series (Iv	y Bridge-EP)
Chipset	Inte	el® C602 PCH + (4)PLX PE	X8747
Chipset Interconnection		Intel® QPI 8.0/ 7.2/ 6.4GT	//s
Number of DIMM Slot		24/ (12+12)	
Memory Type (max. capacity)	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (768GB) R-DDR3 1866/1600/1333/ 1066 w/ ECC (384GB) U-DDR3 1866/1600/1333/ 1066 w/ ECC (192GB)		
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s)  RAID 0, 1, 5, 10 (Intel® RSTe 3.0)  (2) 10GbE/ GbE (shared IPMI NIC)  (8) PCI-E (Gen3) x16 slots + (2) PCI-E (Gen3) x8 slots(one for mezzanine card)  (3) PCI-E (Gen2) x1 slots + (1) PCI 32-bit slot		
RAID Support			
Networking			
PCI Expansion Slots			
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7059F77BV10R (BTO)	(10) Internal 3.5"	N/A	(2+1) 3,200W RPSU
2.00021.01.(2.0)	(10)		( ) - /







## **2U Rack-Optimized Server Platform for HPC**

Model Number	GN70-B7056			
Enclosure Form Factor	2U (27.56" in depth)			
Supported CPU	(2) Intel® Xeon® E5-2600 v2 Series (Ivy Bridge-EP)			
Chipset	Intel® C602 PCH			
QuickPath Interconnect	Intel® QPI 8.0/ 7.2/ 6.4GT/s			
Number of DIMM Slot	16/ (8+8)			
Memory Type (max. capacity)	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (512GB) R-DDR3 1866/1600/ 1333/ 1066 w/ ECC (256GB) U-DDR3 1866/1600/1333/ 1066 w/ ECC (128GB)			
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s) LSI SAS2308 (SAS 6Gb/s)			
RAID Support	RAID 0, 1, 5, 10 (Intel® RSTe 3.0) RAID 0, 1, 1E, 10 (LSI Integrated RAID)			
Networking	(3) GbE (shared IPMI NIC), or (2) 10GbE + (1) GbE (shared IPMI NIC) (-2T SKU)			
PCI Expansion Slots	(2) PCI-E (Gen.3) x16 + (2) PCI-E (Gen.3) x8			
Standard Model	Number of HDD Bay Storage Backplane Power Supply			
B7056G70V8HR	(8) hot-swap 3.5" 8-port SAS/ SATA 6Gb/s (1+1) 770W RPSU			

YR190-B7058-X2 B7058Y190X2-045GV4H

**SMB Platforms** 







Enclosure Form Factor

QuickPath Interconnect (per node)

Number of DIMM Slot

Chinset (ner node)

Supported CPU (per node)

Memory Type (max. capacity)

Storage Controller (per node

PCI Expansion Slots (per node)

B7058Y190X2-045GV4H

**Platform for HPC** 

**1U Rack-Optimized Server** 

YR190-B7058-X2 1U (28.74" in depth) / 2 Nodes

ntel® Xeon® E5-2600 v2 Series (Ivy Bridge-EP)

Intel® C602 PCH

Intel® OPI 8.0/ 7.2/ 6.4GT/s

LR-DDR3 1866/1600/1333/ 1066 w/ ECC (256GB)

R-DDR3 1866/1600/ 1333/ 1066 w/ ECC (128GB)

U-DDR3 1866/1600/1333/ 1066 w/ ECC (64GB)

Intel® C602 PCH (SATA 6Gh/s & 3Gh/s)

RAID 0, 1, 5, 10 (Intel® RSTe 3.0)

(2) GbE + (1) PHY deditcated IPMI

(1) PCI-E (Gen.3) x16

4-port SAS/ SATA 6Gb/s (1) 450W PSU (per node)



## TA77-B7061











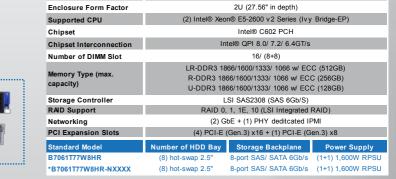




Model Number

## **2U High-density GPU Server Platform for GPGPU applications**

TA77-B7061







## FT48-B7055 B7055F48V8HR / B7055F48W8HR B7055F48V8HR-2T (BTO)







\*B7055F48W8HR-NXXXX







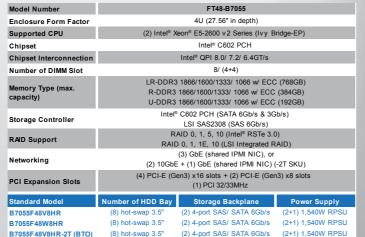












(8) hot-swap 3.5"

(2) 4-port SAS/ SATA 6Gb/s (2+1) 1,540W RPSU









## **1U Server Platform Designed for** up to 2x GPU Cards Deployment

Model Number	GA80-B7061		
Enclosure Form Factor	1U (31.5" in depth)		
Supported CPU	(2) Intel® Xeon® Processor E5-2600 v 2 Series (Ivy Bridge-EP)		
Chipset		Intel® C602 PCH	
Chipset Interconnection	Int	el® QPI 8.0/ 7.2/ 6.4 GT/s	
Number of DIMM Slot		16/ (8+8)	
Memory Type (max. capacity)	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (512GB) R-DDR3 1866/1600/1333/ 1066 w/ ECC (256GB) U-DDR3 1866/1600/1333/ 1066 w/ ECC (128GB)		
Storage Controller	LSI SAS2308 (SAS 6Gb/s)		
RAID Support	RAID 0, 1, 1E, 10 (LSI Integrated RAID)		
Multimedia Drive	N/A		
Networking	(2) GbE + (1) PHY deditcated IPMI		
PCI Expansion Slots	(2) PCI-E (Gen.3) x16; (1) PCI-E (Gen.3) x8		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7061G80W4H (BTO)	(4) hot-swap 2.5"	4-port SAS/ SATA 6Gb/s	(1) 1,200W PSU

**HPC/GPU Platforms** 

**Cloud Platforms** 

Server Board Workstation Board



■ TYAN HPC/GPU Platforms | Intel Based









## **S7045**

S7045AG2NR / S7045WGM2NR S7045GM4NR / S7045WGM4NR (BTO)

Processor	Dual LGA1356 sockets support Intel® Xeon® E5-2400 v2 series processors     (Inc. Bridge EA))
	(Ivy Bridge-EN)
Chipset	· Intel® C602 PCH
	<ul> <li>Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)</li> </ul>
Memory	· (6+6) DDR-III DIMM slots
	<ul> <li>Support up to 384GB of LRDIMM 1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 192GB of R-DDR3 1600/1333/1066 w/ ECC memory</li> </ul>
	· Support up to 96GB of U-DDR3 1333/1066 w/ ECC memory
Expansion	· (1) PCI-E (Gen.3) x8 slot (#7) · (1) PCI-E (Gen.3) x16 slot (w/ x8 link) (#6)
	· (1) PCI-E (Gen.3) x8 slot (w/ x8 link) (#5) · (1) PCI-E (Gen.3) x16 slot (#4)
	· (1) PCI-E (Gen.3) x8 slot (w/ x4 link) (#2) · (1) PCI 32/33MHz slot (#1)
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SAS 3Gb/s ports by (8) SATA conncetors (Intel® RSTe 3.0) (-W SKU)
Network	· (2) GbE (via 2x Intel® 82574L) (S7045AG2NR/S7045WGM2NR)
	· (4) GbE (via Intel® I350-AM2 + 2x Intel® 82574L) (S7045GM4NR/S7045WGM4NR)
Video	ASPEED AST2300 Integrated Graphics
Audio	Realtek ALC262 audio CODEC (S7045AG2NR)

Management · ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM) ("S7045AG2NR without BMC)
Form Factor · SSI EEB (12" x 13", 305mm x 330mm)

### Workstation Board











## **S7050**

\$7050A2NR / \$7050GM2NR / \$7050GM4NR / \$7050WGM4NR \$7050GP2NR-DLE / \$7050G2NR-DLE

Processor	<ul> <li>Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series processors</li> </ul>
	(Ivy Bridge-EP)
Chipset	· Intel® C602 PCH
	Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)
Memory	· (8+8) DDR-III DIMM slots
	· (4+4) DDR-III DIMM slots (-DLE SKU)
	<ul> <li>Support up to 512GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 256GB of R-DDR3 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 128GB of U-DDR3 1866/16001333/1066 w/ ECC memory</li> </ul>
Expansion	· (2) PCI-E (Gen.3) x16 slots (w/ x16 or x8 link)
	· (2) PCI-E (Gen.3) x8 slots (w/ x0 or x8 link)
	· (1) PCI-E (Gen.3) x4 slot
	· (1) PCI 32/33MHz slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SATA 3Gb/s connectors (Intel® RSTe 3.0) (w/o -W SKU)
	· (8) SAS 3Gb/s ports by (8) SATA conncetors (Intel® RSTe 3.0) (-W SKU)
Network	· (4) GbE (via Intel® I350-AM2 + 2x Intel® 82574L) (S7050GM4NR/S7050WGM4NR)
	· (2) GbE (via Intel® 82574L) (S7050GM2NR/S7050A2NR)
Video	ASPEED AST2300 Integrated Graphics
	ASPEED AST1300 Integrated Graphics (S7050G2NR-DLE)
Audio	Realtek ALC262 audio CODEC (S7050A2NR)
Management	ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM) (*S7050A2NR with BMC)
	ASPEED AST2300 (IPMI v2.0 compliant) (S7050GP2NR-DLE)
Form Factor	· SSI EEB (12" x 13", 305mm x 330mm)



## **S7055** \$7055AGM3NR / \$7055WAGM3NR \$7055WGM3NR / \$7055AGM3NR-2T

Processor	<ul> <li>Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series processors (Ivy Bridge-EP)</li> </ul>
Chipset	· Intel® C602 PCH
	· Intel® C602 PCH + TYAN TRK#5 ROM Kit (S7055WGM3NR/S7055WAGM3NF
Memory	· (4+4) DDR-III DIMM slots
	<ul> <li>Support up to 256GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 128GB of R-DDR3 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 64GB of U-DDR3 1866/1600/1333/1066 w/ ECC memory</li> </ul>
Expansion	· (4) PCI-E (Gen.3) x16 slots · (2) PCI-E (Gen.3) x8 slots
	· (1) PCI 32/33MHz slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SAS 3Gb/s ports by (2) mini-SAS conncetors (Intel® RSTe 3.0)
	(S7055WGM3NR/S7055WAGM3NR)
Network	· (3) GbE (via Intel® I350-BT2 and Intel® 82574L)
	(S7055AGM3NR/S7055WGM3NR/S7055WAGM3NR)
	· (2) 10GbE (via Intel® X540-AT2) + (1) GbE (Intel® 82574L) (S7055AGM3NR-2T
Video	ASPEED AST2300 Integrated Graphics
Audio	Realtek ALC262 audio CODEC
	CORREST CALCULATION CONTRACTOR CO

Management · ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)

Form Factor · SSI EEB (12" x 13", 305mm x 330mm)











## **S7065** S7065A2NRF / S7065WA2NRF

Processor	<ul> <li>Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series processo</li> </ul>
	(Ivy Bridge-EP)
Chipset	· Intel® C602 PCH
	Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)
Memory	· (8+8) DDR-III DIMM sockets
	<ul> <li>Support up to 512GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 256GB of R-DDR3 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	· Support up to 128GB of U-DDR3 1866/16001333/1066 w/ ECC memory
	*Speed 1866 only for 1 slot per channel 1.5V(Blue color DIMM slot)
Expansion	· (1) PCI-E (Gen.3) x4 slot (#6)
	· (2) PCI-E (Gen.3) x16 slots (w/ x16 or x8 link) (#5, #3)
	· (2) PCI-E (Gen.3) x8 slots (w/ x0 or x8 link) (#4, #2)
	· (1) PCI-E (Gen.2) x8 slot (w/ x4 link) (#1)
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SAS 3Gb/s ports by (8) SATA conncetors (Intel® RSTe 3.0) (-WKU)
Network	• (2) GbE (via Intel® 82574L)
Audio	Realtek ALC892 7.1 Channel HD Audio Codec with Content Protection
Form Factor	· SSI EEB (12" x 13", 305mm x 330mm)

# TYAN ( INTEL-BASED **CLOUD PLATFORMS**



TYAN offers a full array of products that provide web-based hardware to meet users' business needs toward cloud computing with lower cost. TYAN's Intel® Xeon® Processor E5-2600/ E5-2600 V2/ E3-1200 Product Families based platforms or Intel® Xeon® 5600 Series Processor supporting platforms offer reliability, scalability, flexibility, high density, and remote management capability that deliver higher computing performance with lower cost. TYAN's broad product portfolio provides users with multiple hardware solutions that meet the needs of public, private, and hybrid cloud infrastructure.

### **Target Applications:**

- Cloud Service Providers that Offer Infrastructure as a Service (laaS), Platform as a Service (PaaS), and Software as a Service (SaaS)
- E-Commerce and Web-based Mail services
   Online Real Time Streaming Services such as Consulting or Training
   Back-end Office or Remote Office
   Functional Verticals, VARs, or SI that Assist
- to Deploy Could Computing Hardware Environments for Enterprises or SMBs

FM65-B5531

B5531F65X18-160PV2R B5531F65X18-160PV2R-HE

HPC/GPU Platforms

**Cloud Platforms** 







## **4U High-Density and Power-Efficient Platform for VHD/VDI** Applications

Model Number	FM65-B5531		
Enclosure Form Factor	4U (25.6" in depth) / 18 Nodes		
Supported CPU (per node)	(1)	Intel® Xeon® E3-1285L v (Haswell-DT)	/3
Chipset (per node)	Intel® C222 PCH		
Number of DIMM Slot (per node)	4		
Memory Type (max. capacity) (per node)	U-DDR3 VLP DIMM 1600/1333/1066 w/ ECC (32GB)		
Storage Controller (per node)	Intel® C222 PCH (SATA 6Gb/s) Intel® C226 PCH (SATA 6Gb/s)		
RAID Support (per node)	RAID 0, 1, 5, 10 (Intel® RST 3.x)		
Networking (per node)	(3) GbE (shared IPMI NIC) (2) GbE (shared IPMI NIC)(-HE SKU)		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B5531F65X18-160PV2R	(2) Internal 2.5" (per node)	N/A	(2+1) 1600W RPSU
B5531F65X18-160PV2R-HE	(2) Internal 2.5" (per node)	N/A	(2+1) 1600W RPSU











Model Number	GT24-B7067		
Enclosure Form Factor	1U (25.4" in depth)		
Supported CPU	(2) Intel® Xeon® E5-2600 v 2 Series (Ivy Bridge-EP)		
Chipset	Intel® C602 PCH		
QuickPath Interconnect	Intel® QPI 8.0/ 7.2/ 6.4GT/s		
Number of DIMM Slot	16/(8+8)		
Memory Type (max. capacity)	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (512GB) R-DDR3 1866/1600/ 1333/ 1066 w/ ECC (256GB) U-DDR3 1866/1600/1333/ 1066 w/ ECC (128GB)		
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s) LSI SAS2308 (SAS 6Gb/S)		
RAID Support	RAID 0, 1, 5, 10 (Intel® RSTe 3.0) RAID 0, 1, 1E, 10 (LSI Integrated RAID)		
Networking	(2) 10GbE SFP+ + (1) GbE (shared with IPMI)		
PCI Expansion Slots	(1) PCI-E (Gen.3) x16 (w/ x8 link)		
Standard Model	Number of HDD Bay Storage Backplane Power Supply		
B7067G24V4H-2T B7067G24W4H-2T	(4) hot-swap 3.5"/2.5"		





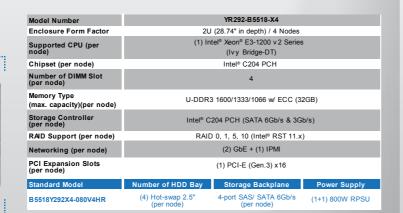












GT62A-B5512 B7058Y190X2-045GV4H











## **1U Rack-Optimized Server Platform for CLOUD**

Model Number	GT62AB5512			
Enclosure Form Factor	1U (25.4" in depth)			
Supported CPU	(1) Intel® Xeon® E3-1200 v2 series (Ivy Bridge-DT)			
Chipset		Intel® C204 PCH		
Number of DIMM Slot		4		
Memory Type (max. capacity)	U-DDR3	1600/1333/1066 w/ ECC (32G	B)	
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s) LSI SAS2008 (SAS 6Gb/S)			
RAID Support	RAID 0, 1, 5, 10 (Intel® RST 11.x) RAID 0, 1, 10 (LSI Integrated RAID)			
Networking	(2) GbE + (1) PHY deditcated IPMI			
PCI Expansion Slots	(1) PCI-E (Gen.3) x8			
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply	
B5512G62AW10H	(10) hot-swap 2.5"	10-port SAS/ SATA 6Gb/s	(1) 500W PSU	
B5512G62AV10H	(10) hot-swap 2.5" *Need a discrete HBA to enable all ten (10) driv es	10-port SAS/ SATA 6Gb/s	(1) 500W PSU	

**HPC/GPU Platforms** 

**Cloud Platforms** 



## A Broad Portfolio of Enclosures Compatible with Multiple Motherboards Fitting in Different Environments Ranging from Embedded, SMB, Cloud computing, GPU to HPC.

TYAN presents a wide range of enclosures compatible with various server and workstation motherboards that offer outstanding reliability, flexibility and scalability in a cost-effective package. These server enclosures present an outstanding value for system integrators, OEM/ODM manufacturers, and channel partners alike. The latest array of TYAN chassis kits are available in 1U, 2U or 4U form factors and support extensive motherboard product lines. TYAN's wide range of chassis kits combine customer requirements of affordable total cost of ownership with massive computing power.













KTN70AM1-077GV24HRFE (24) hot-swap 2.5" + (2) internal 2.5"

### ■ TYAN CLOUD Platforms | Intel Based













S7063WGM3NR-2T / S7063GM3NR-2

Processor	Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series
	processors (Ivy Bridge-EP)
Chipset	· Intel® C602 PCH
Memory	· (8+8) DDR-III DIMM slots
	· Support up to 512GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory
	· Support up to 256GB of R-DDR3 1866/1600/1333/1066 w/ ECC memory
	· Support up to 128GB of U-DDR3 1866/1600/1333/1066 w/ ECC memory
Expansion	· (1) PCI-E (Gen.3) x8 slots
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s ports by (1) mini-SAS connector (Intel® RSTe 3.0)
	· (8) SAS 6Gb/s ports by (2) mini-SAS conncetors (LSI RAID stack)
	(-W SKU)
Network	· (2) 10GbE SPF+ (via Intel® 82599ES)
	· (1) GbE shared IPMI ( via Intel® 82574L)
Video	ASPEED AST2300 Integrated Graphics
Management	ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
Form Factor	• EATX (12" x 13", 305mm x 330mm)

## Server Board













## **S5512**

S5512G2NR-LE / S5512WGM2NR / S5512GM4NR

Processor	<ul> <li>Single LGA1155 socket supports Intel® Xeon® E3-1200/ E3-1200 v2</li> </ul>
	series processors (Ivy Bridge-DT)
Chipset	· Intel® C202 PCH (S5512G2NR-LE)
	· Intel® C204 PCH (S5512GM4NR)
	· Intel® C204 PCH + LSI SAS2008 (-W SKU)
Memory	· (4) DDR-III DIMM slots
	<ul> <li>Support up to 32GB of U-DDR3 1600/1333/1066 w/ ECC memory</li> </ul>
Expansion	· (1) PCI-E (Gen.2/Gen.3) x16 slot (w/ x8 link)
	· (1) PCI-E (Gen.2/Gen.3) x8 slot (w/ x8 link)
	<ul> <li>(1) PCI-E (Gen.2/Gen.3) x8 slot (w/ x4 link) (S5512GM4NR)</li> </ul>
	· (2) PCI-E (Gen.2) x1 slots
	· (1) PCI 32/33MHz slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RST 11.x)
	· (4) SATA 3Gb/s connectors (Intel® RST 11.x)
	· (8) SAS 6Gb/s connectors (LSI RAID stack) (-W SKU)
Network	· (2) GbE (via 2x Intel® 82574L) (S5512G2NR-LE/S5512WGM2NR)
	· (4) GbE (via 4x Intel® 82574L) (S5512GM4NR)
Video	ASPEED AST2150 Integrated Graphics
Management	ASPEED AST2150 (IPMI v2.0 compliant w/ iKVM) (*S5512G2NR-LE
	without BMC)
Form Factor	• ATX (12" x 9.6", 305mm x 243.84mm)
	, , ,

## **S7067**

Processor	<ul> <li>Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series</li> </ul>
	processors (Ivy Bridge-EP)
Chipset	· Intel® C602 PCH
Memory	· (8+8) DDR-III DIMM slots
	<ul> <li>Support up to 512GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	· Support up to 256GB of R-DDR3 1866/1600/1333/1066 w/ ECC memo
	<ul> <li>Support up to 128GB of U-DDR3 1866/1600/1333/1066 w/ ECC memo</li> </ul>
Expansion	· (1) PCI-E (Gen.3) x8 slots
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s ports by (1) mini-SAS connector (Intel® RSTe 3.0)
	· (8) SAS 6Gb/s ports by (2) mini-SAS conncetors (LSI RAID stack)
	(-W SKU)
Network	· (2) 10GbE SFP+ (via Broadcom® BCM57810S)
	· (1) GbE shared IMPI ( via Intel® 82574L)
Video	ASPEED AST2300 Integrated Graphics
Management	ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
Form Factor	• EATX (12" x 13", 305mm x 330mm)













### **S5530** S5530WGM5NR-LE-2T

Processor	<ul> <li>Single LGA1150 socket supports Intel® Xeon® E3-1200 v3/ 4th</li> </ul>
	generation Intel® Core™ i3 series processors (Haswell-DT)
Chipset	· Intel® C222 PCH
Memory	(4) DDR-III DIMM slots
	<ul> <li>Support up to 32GB U-DDR3 1600/1333 w/ ECC</li> </ul>
Expansion	· (1) PCI-E (Gen.2) x4 slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.6)
	• (4) SATA 3Gb/s connectors (Intel® RSTe 3.6)
	· (8) SAS 6Gb/s by (2) Mini-SAS connectors (LSI RAID stack)
Network	• (2) GbE (via 2x Intel® i210)
	· (2) 10GbE SFP+ (via Broadcom® BCM57810S)
	(1) GbE shared IPMI NIC (via Intel® i217)
Video	ASPEED AST2300 Integrated Graphics
Management	ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
Form Factor	· ATX (12" x 9.6", 305mm x 243.84mm)

# TYAN ( INTEL-BASED SMB PLATFORMS



Multiple TYAN® platforms offer small and medium sized businesses (SMB) the capability to access and execute a greater amount of computer applications by sharing resources in an effective and efficient way. Supporting the Intel® Xeon® Processor E5-2600-V2/ E5-2400/ E3-1200 product families and Intel Xeon 5600 Series Processor, TYAN's SMB platforms allow customers to manage multiple workloads with higher computing performance at lower total cost of ownership. These platforms feature reliable, affordable, and simple setup. They also offer easy management and support industry standard operating systems that make them the ideal hardware solution for the small and remote office, entry-level server applications, and the standard rackmount server room.

### **Target Applications:**

- Entry-level Server and General Server Room
- Computer Services
  Automotive and Industrial Products
- · Consumer Products
- · Education

- Electronics
   Energy & Utilities
   Fabrication & Assembly
   Banking, Insurance and Financial Markets
- · Healthcare · Media & Entertainment · E-commerce and Retail
- Web hosting and Database Telecommunications

Cloud Platforms

**SMB Platforms** 









## GT20A-B7040 B7040G20AV4H





## **1U Rack-Optimized Cost-Effective Platfrom**

Model Number	GT20AB7040		
Enclosure Form Factor	1U (22.4" in depth)		
Supported CPU	(2) Intel® Xeon® E5-2400 v 2 Series (Ivy Bridge-EN)		
Chipset		Intel® C602 PCH	
QuickPath Interconnect	I	Intel® QPI 8.0/ 7.2/ 6.4GT/s	
Number of DIMM Slot	9/ (6+3)		
Memory Type (max. capacity)	LR-DDR3 1333/ 1066 w/ ECC (288GB) R-DDR3 1600/ 1333/ 1066 w/ ECC (144GB) U-DDR3 1333/ 1066 w/ ECC (72GB)		
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s)		
RAID Support	RAID 0, 1, 5, 10 (Intel® RSTe 3.0)		
Networking	(2) GbE (shared IPMI NIC)		
PCI Expansion Slots		(1) PCI-E (Gen.3) x8	
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7040G20AV4H	(4) hot-swap 3.5"/2.5"	4-port SAS/ SATA 6Gb/s	(1) 500W PSU

## GT24-B7066

B7066G24V4H / B7066G24W4HR(BTO) / B7066G24W4H









## **1U Rack-Optimized Server Platform for HPC**

Model Number	GT24-B7066		
Enclosure Form Factor		1U (25.4" in depth)	
Supported CPU	(2) Intel® Xe	on® E5-2600 v2 Series (Ivy	Bridge-EP)
Chipset		Intel® C602 PCH	
QuickPath Interconnect		Intel® QPI 8.0/ 7.2/ 6.4GT/s	
Number of DIMM Slot		16/(8+8)	
Memory Type (max. capacity)	LR-DDR3 1866/1600/1333/ 1066 w/ ECC (512GB) R-DDR3 1866/1600/ 1333/ 1066 w/ ECC (256GB) U-DDR3 1866/1600/1333/ 1066 w/ ECC (128GB)		
Storage Controller	Intel® C602 PCH (SATA 6Gb/s & 3Gb/s) LSI SAS2308 (SAS 6Gb/S)		
RAID Support	RAID 0, 1, 5, 10 (Intel® RSTe 3.0) RAID 0, 1, 1E, 10 (LSI Integrated RAID)		
Networking		(3) GbE (shared IPMI NIC)	
PCI Expansion Slots	(2) PCI-E (Gen.3) x16		
Standard Model	Number of HDD Bay	Storage Backplane	Power Supply
B7066G24V4H	(4) hot-swap 3.5"/2.5"	4-port SAS/ SATA 6Gb/s	(1) 500W EPS1U
B7066G24W4HR(BTO)	(4) hot-swap 3.5"/2.5"	4-port SAS/ SATA 6Gb/s	(1+1) 450W RPSU
B7066G24W4H	(4) hot-swap 3.5"/2.5"	4-port SAS/ SATA 6Gb/s	(1) 500W PSU











## **S7040**

**S5532** 

Chipset Memory

Expansion

Network

Processor	<ul> <li>Dual LGA1356 sockets support Intel® Xeon® E5-2400 v2 series</li> </ul>
	processors (Ivy Bridge-EN)
Chipset	· Intel® C602 PCH
-	Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)
Memory	· (6+3) DDR-III DIMM sockets
	<ul> <li>Support up to 288GB of LRDIMM 1333/1066 w/ ECC memory</li> </ul>
	· Support up to 144GB of R-DDR3 1600/1333/1066 w/ ECC memory
	<ul> <li>Support up to 72GB of U-DDR3 1333/1066 w/ ECC memory</li> </ul>
Expansion	· (1) PCI-E (Gen.3) x16 slot (w/ x8 link)
	· (1) PCI-E (Gen.3) x8 slot (w/ x8 link)
	· (1) PCI-E (Gen.3) x8 slot (w/ x4 link)
	· (1) PCI 32/33MHz slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SAS 3Gb/s connectors (Intel® RSTe 3.0) (-W SKU)
Network	· (2) GbE (via Intel® I350-AM2)
	· (4) GbE (via Intel® I350-AM2 and 2x Intel® 82574L) (S7040GM4NR)
Video	ASPEED AST2300 Integrated Graphics
	ASPEED AST1300 Integrated Graphics (S7040G2NR)
Management	ASPEED AST2300 (IPMLv2 0 compliant w/ iKVM)

Form Factor • SSI CEB (12" x 10.6", 305mm x 269.24mm)

\$5532GM2NR-LE / \$5532WGM2NR-LE / \$5532GM4NR-LE

Support up to 32GB U-DDR3 1600/1333 w/ ECC
 (1) PCI-E (Gen.3) x16 slot (w/ x8 link)

(1) PCI-E (Gen.3) x8 slot (N/A on -W SKU) (1) PCI-E (Gen.2) x8 slot (w/ x1 link)
(2) PCI-E (Gen.2) x4 slots (w/ x1 link) · (2) SATA 6Gb/s connectors (Intel® RSTe 3.6) · (4) SATA 3Gb/s connectors (Intel® RSTe 3.6) (8) SAS 6Gb/s connectors (LSI RAID stack) (-W SKU)
 (4) GbE (via 4x Intel® i210) (-4NR SKU)

Video ASPEED AST2300 Integrated Graphics

Management ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)

Form Factor ATX (12" x 9.6", 305mm x 243.84mm)

· Single LGA1150 socket supports Intel® Xeon® E3-1200 v3/ 4th generation Intel® Core™ i3 series processors (Haswell-DT)

· Intel® C222 PCH

· (4) DDR-III DIMM slots

· (2) GbE (via 2x Intel® i210) (-2NR SKU) · (1) FE dedicated IPMI (via Broadcom® BCM5221A) (-M SKU)

S5532G2NR-LE / S5532WGM4NR-LE

Processor	Dual LGA1356 sockets support Intel® Xeon® E5-2400 v2 series
10003301	processors (Ivy Bridge-EN)
Chipset	· Intel® C602 PCH
	<ul> <li>Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)</li> </ul>
Memory	(6+3) DDR-III DIMM sockets
	<ul> <li>Support up to 288GB of LRDIMM 1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 144GB of R-DDR3 1600/1333/1066 w/ ECC memory</li> </ul>
	<ul> <li>Support up to 72GB of U-DDR3 1333/1066 w/ ECC memory</li> </ul>
Expansion	<ul> <li>(1) PCI-E (Gen.3) x16 slot (w/ x8 link)</li> </ul>
	<ul> <li>(1) PCI-E (Gen.3) x8 slot (w/ x8 link)</li> </ul>
	· (1) PCI-E (Gen.3) x8 slot (w/ x4 link)
	· (1) PCI 32/33MHz slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
	· (8) SAS 3Gb/s connectors (Intel® RSTe 3.0) (-W SKU)
Network	· (2) GbE (via Intel® I350-AM2)
	· (4) GbE (via Intel® I350-AM2 and 2x Intel® 82574L) (S7040GM4NR)
Video	ASPEED AST2300 Integrated Graphics
	ASPEED AST1300 Integrated Graphics (S7040G2NR)











## **S5533**

Processor	<ul> <li>Single LGA1150 socket supports Intel® Xeon® E3-1200 v3/ 4th generation Intel® Core™ i3 series processors (Haswell-DT)</li> </ul>
Chipset	· Intel® C222 PCH
Memory	· (2) DDR-III DIMM slots
	<ul> <li>Support up to 16GB U-DDR3 1600/1333 w/ ECC</li> </ul>
Expansion	· (1) PCI-E (Gen.3) x16 slot
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.6)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.6)
Network	· (2) GbE (via 2x Intel® i210)
	· (1) FE dedicated IPMI (via Realtek® RTL 8211EL)
Video	ASPEED AST2300 Integrated Graphics
Management	ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
Form Factor	• Mini-ITX (6.7" x 6.7", 170mm x 170mm)



**S7042** 

Chipset

S7042WAGM2NR / S7042AGM2NR S7042GP2NR-B / S7042G2NR-LE-B

processors (Ivy Bridge-EN)

• Intel® C602 PCH

· (4+4) DDR-III DIMM slots

Form Factor · SSI CEB (12" x 10.5", 305mm x 267mm)

Processor • Dual LGA1356 sockets support Intel® Xeon® E5-2400 v2 series

· Intel® C602 PCH + TYAN TRK#5 ROM Kit (-W SKU)

Management · ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
 · ASPEED AST2300 (IPMI v2.0 compliant) (S7042GP2NR-B)

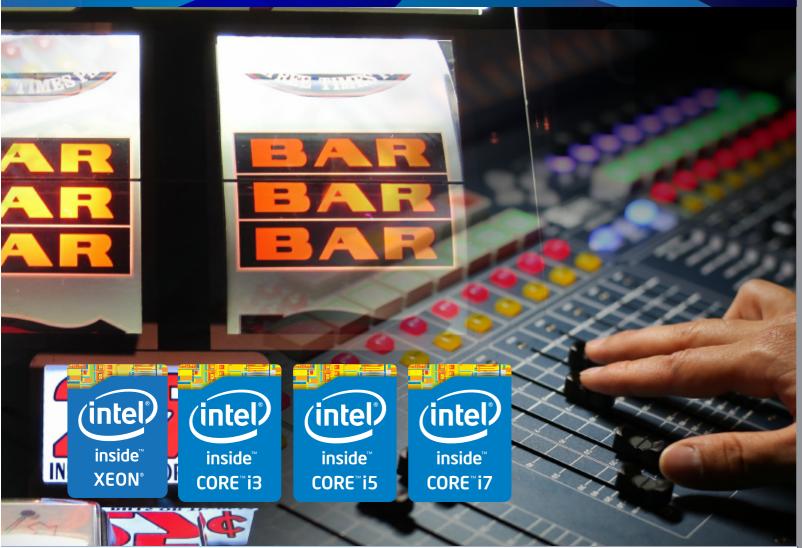
 Support up to 288GB of LRDIMM 1333/1066 w/ ECC memory
 Support up to 144GB of R-DDR3 1600/1333/1066 w/ ECC memory Support up to 72GB of U-DDR3 1333/1066 w/ ECC memory







# TYAN ( INTEL-BASED EMBEDDED PLATFORMS



Many of TYAN's Intel based platforms are designed for embedded applications which ensure that customers will have strong performance, consistent reliability, and low cost in small form factor. These TYAN products are ideal platforms for customers with critical requirements from telecom, networking, storage, medical imaging, embedded severs, security and surveillance appliances.

### **Target Applications:**

- Security & Surveillance Digital Signage and Imaging
  Set Top Box
- Gaming

## **S5535**

### S5535AG2NR

 Single LGA1150 socket supports Intel® Core™ i3/i5/i7 series processors (Haswell-DT) Intel® Q87 PCH (4) DDR-III DIMM slots Support up to 32GB U-DDR3 1600/1333 Non-ECC (1) PCI-E (Gen.2) x8 slot (w/ x4 link) (1) PCI-E (Gen.2) x1 slot (5) SATA 6Gb/s connectors (Intel® RST 12.x) · (2) GbE (via Intel® i210 & Intel® i217) Intel Processor Graphics(pGFX)
Realtek ALC892GR Integrated Graph Form Factor • mATX (9.6" x 9.6", 243.84mm x 243.84mm











## **\$5535-HE**\$5535AG2NR-HE

Processor	<ul> <li>Single LGA1150 socket supports Intel® Xeon® E3-1200 v3/4th generation Intel® Core™ i3 series processors (Haswell-DT)</li> </ul>
Chipset	· Intel® C226 PCH
Memory	· (4) DDR-III DIMM slots
	<ul> <li>Support up to 32GB U-DDR3 1600/1333 w/ ECC</li> </ul>
Expansion	· (1) PCI-E (Gen.3) x16 slot
	· (1) PCI-E (Gen.2) x8 slot (w/ x4 link)
	· (1) PCI-E (Gen.2) x1 slot"
Storage	· (5) SATA 6Gb/s connectors (Intel® RST 12.x)
Network	· (2) GbE (via Intel® i210 & Intel® i217)
Video	Intel Processor Graphics(pGFX)
	Realtek ALC892GR Integrated Graphics
Form Factor	<ul> <li>mATX (9.6" x 9.6", 243.84mm x 243.84mm)</li> </ul>













## S5532-HE

Processor	<ul> <li>Single LGA1150 socket supports Intel® Xeon® E3-1200 v3/ 4th generation Intel® Core™ i3 series processors (Haswell-DT)</li> </ul>
Chipset	· Intel® C226 PCH
Memory	· (4) DDR-III DIMM slots
	<ul> <li>Support up to 32GB U-DDR3 1600/1333 w/ ECC</li> </ul>
Expansion	· (1) PCI-E (Gen.3) x16 slot (w/ x8 link)
	· (1) PCI-E (Gen.3) x8 slot
	· (1) PCI-E (Gen.2) x8 slot (w/ x1 link)
	· (2) PCI-E (Gen.2) x4 slots (w/ x1 link)
Storage	(6) SATA 6Gb/s connectors (Intel® RSTe 3.6)
Network	· (2) GbE (via 2x Intel® i210)
Video	ASPEED AST1300 Integrated Graphics
Form Factor	• ATY (12" v 0 6" 305mm v 2/3 8/mm)









## S7053-HE

Form Factor · SSI EEB (12" x 13", 305mm x 330mm)

Processor	Dual LGA2011 sockets support Intel® Xeon® E5-2600 v2 series
	processors (Ivy Bridge-EP)
Chipset	· Intel® C602-J PCH
Memory	· (8+8) DDR-III DIMM sockets
	<ul> <li>Support up to 512GB of LRDIMM 1866/1600/1333/1066 w/ ECC memory</li> </ul>
	· Support up to 256GB of R-DDR3 1866/1600/1333/1066 w/ ECC memory
	· Support up to 128GB of U-DDR3 1866/1600/1333/1066 w/ ECC memory
Expansion	· (2) PCI-E (Gen.3) x16 slots
	· (4) PCI-E (Gen.3) x8 slots
Storage	· (2) SATA 6Gb/s connectors (Intel® RSTe 3.0)
	· (4) SATA 3Gb/s connectors (Intel® RSTe 3.0)
Network	· (2) GbE (via Intel® I350-AM2)
Video	ASPEED AST2300 Integrated Graphics
Managemen	t · ASPEED AST2300 (IPMI v2.0 compliant w/ iKVM)
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