

ASRock
Rack

Reliable Server
Advancing Technology
Considerable Design
Knowledgeable Professional

ASRock
Rack

HPC. Big Data. Convergence.

Product Guide

Server Barbones & Workstation Motherboards Solutions

Sep 2017

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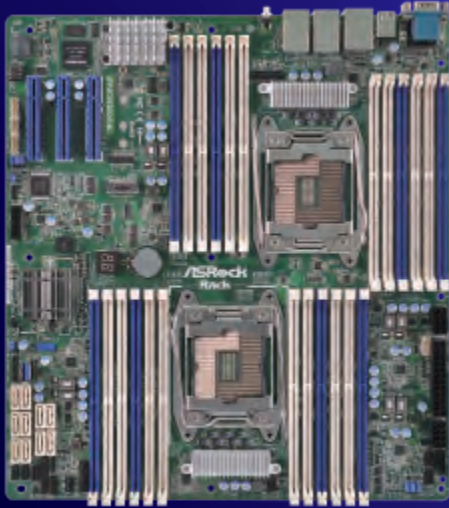
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About ASRock Rack

ASRock Rack Inc., established in 2013, specialized in the field of Cloud Computing server hardware. While inheriting ASRock's 3C design concepts, the company is dedicated to bring the Server Industry out of the box thinking with the passion to innovate. Leveraged by ASRock's growing momentum and distribution channels, this young and vibrant company targets at the booming market of Cloud Computing, and commits to serve the market with user friendly and eco friendly Do It Yourself Server hardware, featuring flexible and reliable products. For further information, please visit: <http://www.asrockrack.com/>

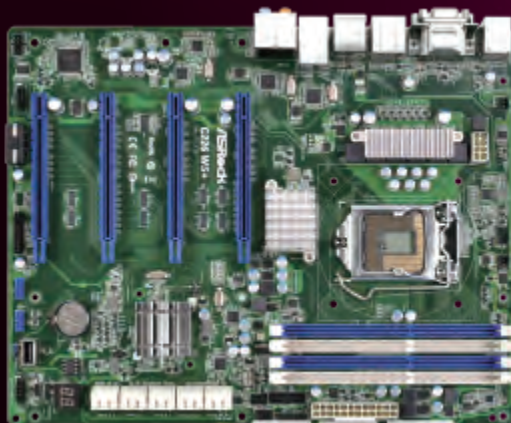


Server Motherboards

Ultimate Dual Sockets Motherboards. Powerful Solution in Every Aspects Under Minimal Power Consumption

Barebone series

Unique Half Width Board Design
4U 2-Node High Performance Server/ Storage Platform



Workstation Motherboards

Ideal Solution for Multi-Display
4 PCIe16 Slots for Double-Width GPU Cards

Server Motherboard

Intel® Xeon E5	EP2C622D16NM	S-01
	EPC621D8A	S-02
	EP2C622D24HM	S-03
	EP2C622D16HM	S-04
	EP2C622D24LM	S-05
	EP2C622D16FM	S-06
	X200D6HM2	S-07
	EP2C612D24-4L	S-08
	EP2C612D8C	S-09
	EP2C612D16-2L2T	S-10
	EP2C612D16C-4L	S-11
	EP2C612D16NM-2T8R / EP2C612D16NM-8R / EP2C612D16NM	S-12
	EP2C612D16FM2	S-13
	EP2D612D16FM / EP2C612D16FM-N	S-14
	EP2C612SM-2T / EP2C612D16SM	S-15
	EP2C612D8-2T8R / EP2C612D8-8R/EP2C612D8	S-16
	OCP-C612HM	S-17
	EP2C612D16HM-2T / EP2C612D16HM	S-18
	EP2C612D8HM	S-19
	EPC612D8A/EPC612D8	S-20
	EP2C612 WS	S-21
	EPC612D4U-2T8R / EPC612D4U-8R / EPC612D4U	S-22
	EPC612D4I	S-23
Intel® Xeon E3	E3C236D4M-4L	S-24
	E3C236D4U / E3C232D4U / E3C232D4U-V1L	S-25
	E3C236D2I	S-26
	E3C222D4U	S-27
	E3C226D2I / E3C224D2I	S-28
	E3C236D4I-44E85	S-29
	C236 WSI4-85 / C236WSI4-85L / C236 WSI4-65L	S-30
	D1541D4U-2T8R / D1541D4U-2O8R / D1541D4U-2L+ / D1521D4U-2L+	S-31
	D1541D4I-2L2T / D1541D4I / D1521D4I	S-32
	C3758D4U-2TP	S-33
Intel® SoC	C3758D4I-4L/C3558D4I-4L	S-34
	C2750D4I / C2750D4I+ / C2550D4I	S-35

Workstation Motherboard

C236M WS	W-01
C236 WS	W-02
C236 WSI	W-03
C226M WS / H97M WS	W-04
C226 WS+	W-05
C226 WS	W-06

Accessory Kits

MP-1543R4 / MP-557R2 / MP-4227R2 / MP-4223R4	A-01
M599 / M599S / M540 / M350 / M350R	A-02
M710 / M710S / MCX3	A-03
M3008 / M3108 / 1U12LIW_RB1 / RB1UX16 / RB1X16L	A-04

Barebone

OCP3-1L	B-01
1U12XL-C622 RPSU	B-02
1U2FH-4L	B-03
1U12LW-C2750	B-04
2U4FH-8L	B-05
2U2G	B-06
2U4N-R/24S	B-07
2U4N-F2T / 2U4N-F	B-08
3U8G+	B-09
3U16N	B-10
4U10G-F	B-11
4U60L Series	B-12

Server Platform Naming Rule

EP2C602-2T2OS6/D16

Character	Representation	Options
1st + 2nd	CPU Type	<ul style="list-style-type: none"> • EP = Xeon® E5-2600 series • E3 = Xeon® E3-1200 series
3rd	Number of CPU Supported	<ul style="list-style-type: none"> • 2 = Dual • NA = Single
4th ~ 6th	Chipset	<ul style="list-style-type: none"> • C602 = Intel C602 chipset • C612 = Intel C612 chipset • C622 = Intel C622 chipset • C204 = Intel C204 • C224 = Intel C224 • C226 = Intel C226 • C236 = Intel C236 • Q87 = Intel Q87 • H87 = Intel H87
others	Feature	<ul style="list-style-type: none"> • 2T = 2 x 10G Base-T LAN • 2O = 2 x 10G optical LAN (SFP+) • 2L+ = 2 x GLAN • 8R = 8-port RAID • 14S = 14 SATA ports • 16RE = 16-port RAID Expander • A = Audio • C = Cost effective • M = Mezzanine card support / Micro ATX (uATX) • MP = Mezzanine PHY card support • N = non-shading • S6 = LSI SAS2 6Gbps • SM = Storage Mezzanine Card support • T = DDR3 • V or V+ = VGA only (AST1300)
	DIMM support	<ul style="list-style-type: none"> • D8 = 8 DIMM • D16 = 16 DIMM • D24 = 24 DIMM
	Reserved	<ul style="list-style-type: none"> • H = Half-width size • M = Mezzanine card support • I = Mini-ITX size • F = Front I/O • -N = without Front PCIE

2U12L6SW-2TS6

Character	Representation	Options
1st + 2nd	System Height	<ul style="list-style-type: none"> • 1U = 1U chassis • 2U = 2U chassis • 3U = 3U chassis • 4U = 4U chassis
3rd~7th	HDD Bay	<ul style="list-style-type: none"> • 12L6S = 12 x 3.5" HDD + 6x 2.5" HDD • 12L = 12 x 3.5" HDD • ⋮ L : 3.5" HDD Bay, S: 2.5" HDD Bay

ASRock® — Rack —

Scale Up Collection Excelled by Purley



EP2C622D24HM



EP2C622D16NM



EPC621D8A



1U12XLC622-RPSU





XEON Scalable
Socket P 3647

EP2C622D16NM



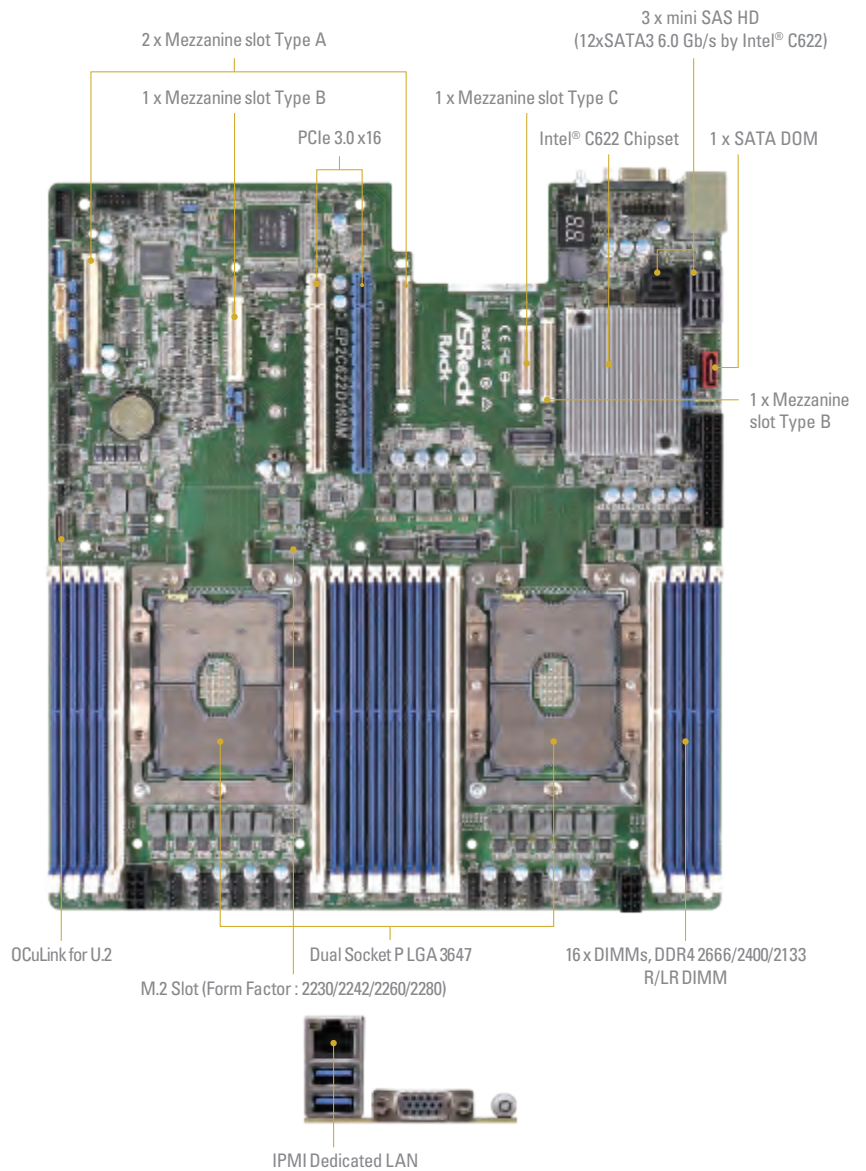
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Half-width



Application

- Datacenter Co-location
- Mission Critical
- Hyper Converge
- Database or Hadoop Server with SSD Acceleration
- I/O virtualization

		EP2C622D16NM
Form Factor		EEB(12" x13")
Processor Support		Dual Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Max 205W)
Chipset		Intel® C622
Memory		Six Channel, 16 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel C622 : 12 x SATA3+ 1x SATA DOM ports + 1x M.2 ports)
	Additional	N/A
	OCuLink for U.2	x8 from CPU2
Expansion Slots		2 x PCIe 3.0 x16
Ethernet	LAN Controller	N/A
	LAN Port	N/A
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ikm, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0, 2 via header)
Mezzanine		2x Mezzanine Type A((1x for OCP LAN, 1x for Storage), 1x Mezzanine Type B, 1x Mezzanine Type C

- Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M3008S, M3108, M3008(only for board level)
- Compatible Mezzanine Type C: MP-557R2, MP-557R4, MP-4223R4, MP-4227R2, MP-1543R4



EPC621D8A



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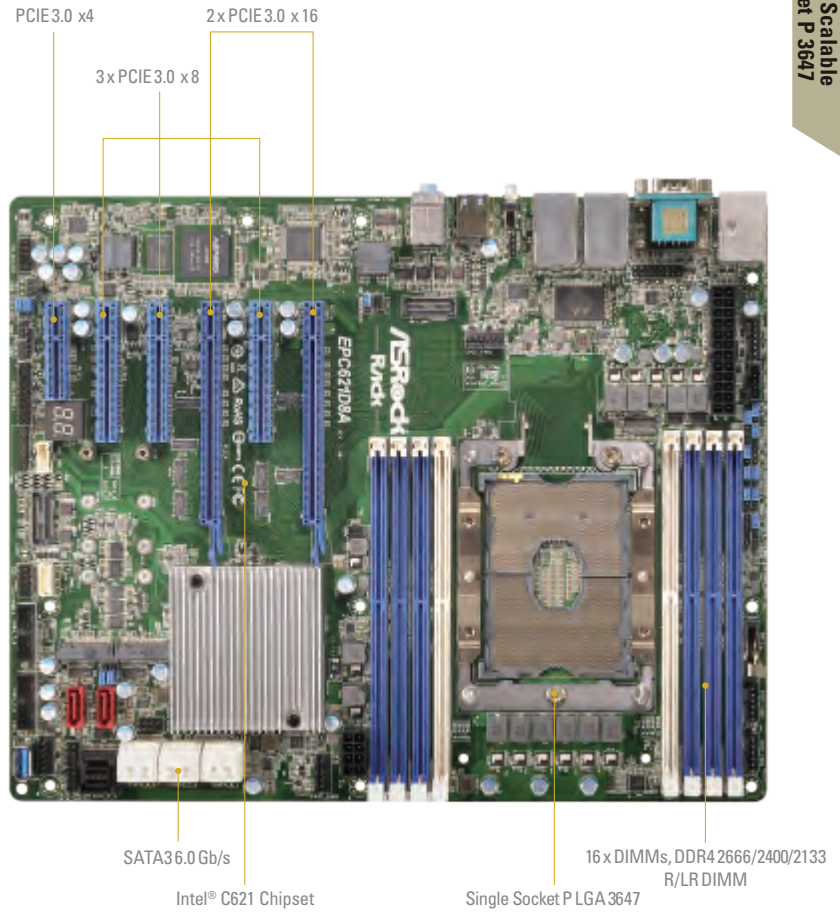


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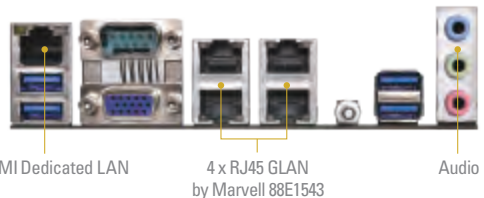
Workstation

XEON Scalable
Socket P 3647



Application

- UP Solution for Application Server
- High-end Workstation
- Entry GPGPU Server
- Multi-display Server / Digital Signage
- Hadoop Application



		EPC621D8A
Form Factor		ATX(12" x9.6")
Processor Support		Single Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Max 205W)
Chipset		Intel® C621
Memory		Six Channels, 8 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel C622 : 14x SATA3 (including 2 SATA DOM ports and 2 M.2 ports)
	Additional	N/A
Expansion Slots		2 x PCIe 3.0 x16, 2 x PCIe 3.0 x 8, 1 x PCIe 3.0 x 4
Ethernet	LAN Controller	1x Marvell 88E1543(supprt 4x GLAN)
	LAN Port	RJ45:4+1(IPMI 2.0)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ikm, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		9 (4 from rear I/O, 1 Type A USB 3.0, 4 via header)



XEON Scalable
Socket P 3647

EP2C622D24HM



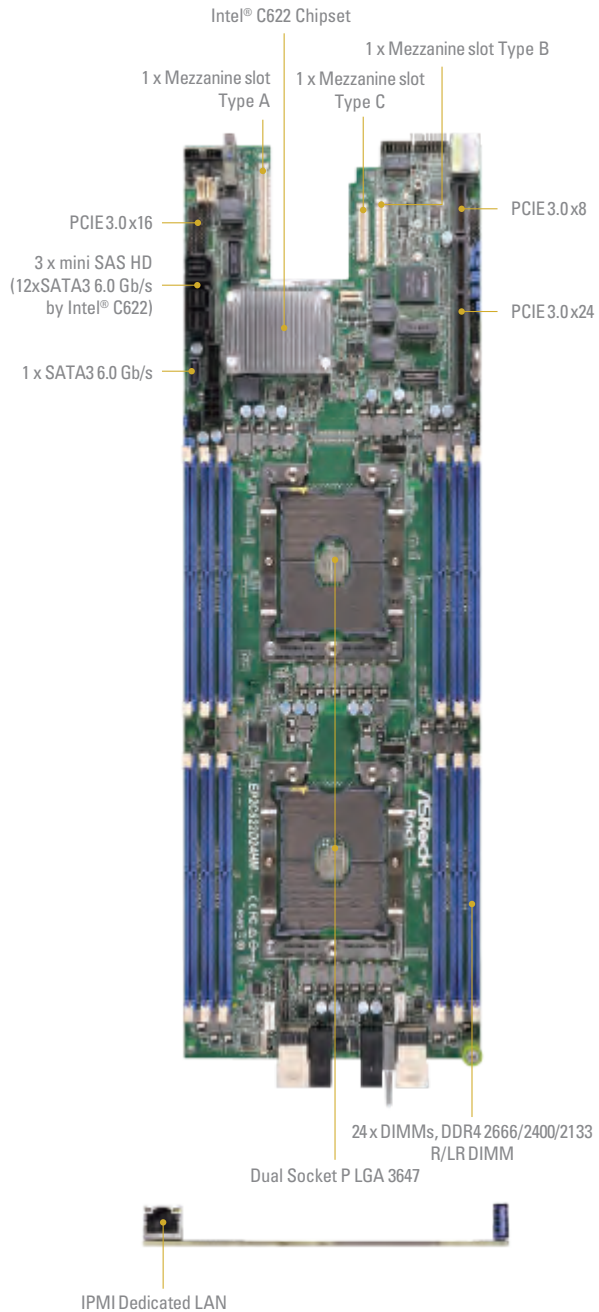
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Open Compatible



Application

- High Performance and High-density HPC
- Mission Critical
- Hyper Converge
- Database or Hadoop Server with SSD Acceleration
- I/O virtualization
- Co-location

		EP2C622D24HM
Form Factor		Half Width(OCP Blade, 6.5" x20")
Processor Support		Dual Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Max 205W: design ready)
Chipset		Intel® C622
Memory		Six Channels, 24 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel® C622:13 SATA3(by 3 miniSAS HD (SATA 0-7, sSATA 1-3) & 1 sSATA (SATA share with M.2)
	Additional	N/A
Expansion Slots		1 x PCIe 3.0 x24, 1 x PCIe 3.0 x8
Ethernet	LAN Controller	N/A
	LAN Port	RJ45:1(IPMI)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ikmv, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		4(1 from rear I/O, 1 Type A USB 3.0, 2 via header)
Mezzanine		1x Mezzanine Type A, x Mezzanine Type B, 1x Mezzanine Type C

- Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M3008S(only for board level)
- Compatible Mezzanine Type C: MP-557R2, MP-557R4, MP-4223R4, MP-4227R2, MP-1543R4



EP2C622D16HM



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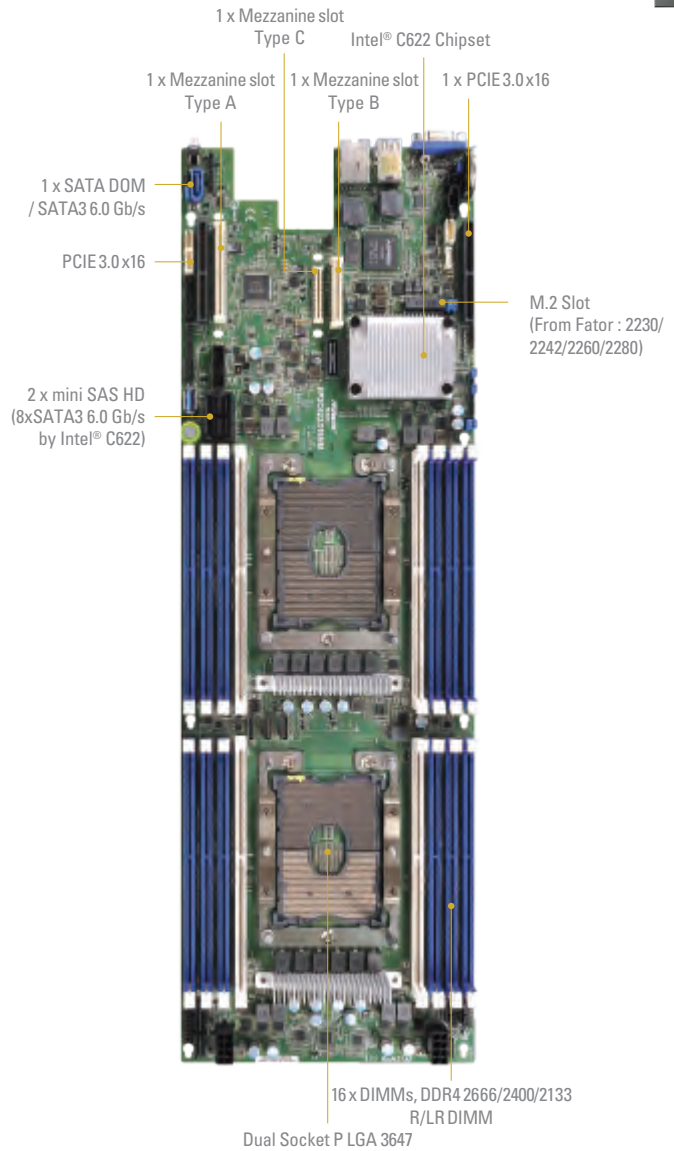


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Half-width

XEON Scalable
Socket P 3647



Application

- High Performance Computing Node
- Virtualization Server
- DPI Server
- Internet Security

		EP2C622D16HM
Form Factor		Half Width(6.5" x20")
Processor Support		Dual Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Man 205W: design ready)
Chipset		Intel® C622
Memory		Six Channel, 16 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel C622 : 10 x SATA3 (including 1x SATA DOM ports and 1x M.2 ports)
	Additional	N/A
Expansion Slots		2 x PCIe 3.0 x16
Ethernet	LAN Controller	N/A
	LAN Port	RJ45:1(IPMI)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ickvm \ vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0, 2 via header)
Mezzanine		1x Mezzanine Type A, 1x Mezzanine Type B, 1x Mezzanine Type C

• Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M540R, M599R, M3008S(only for board level)
 • Compatible Mezzanine Type C: MP-4227R2



EP2C622D24LM



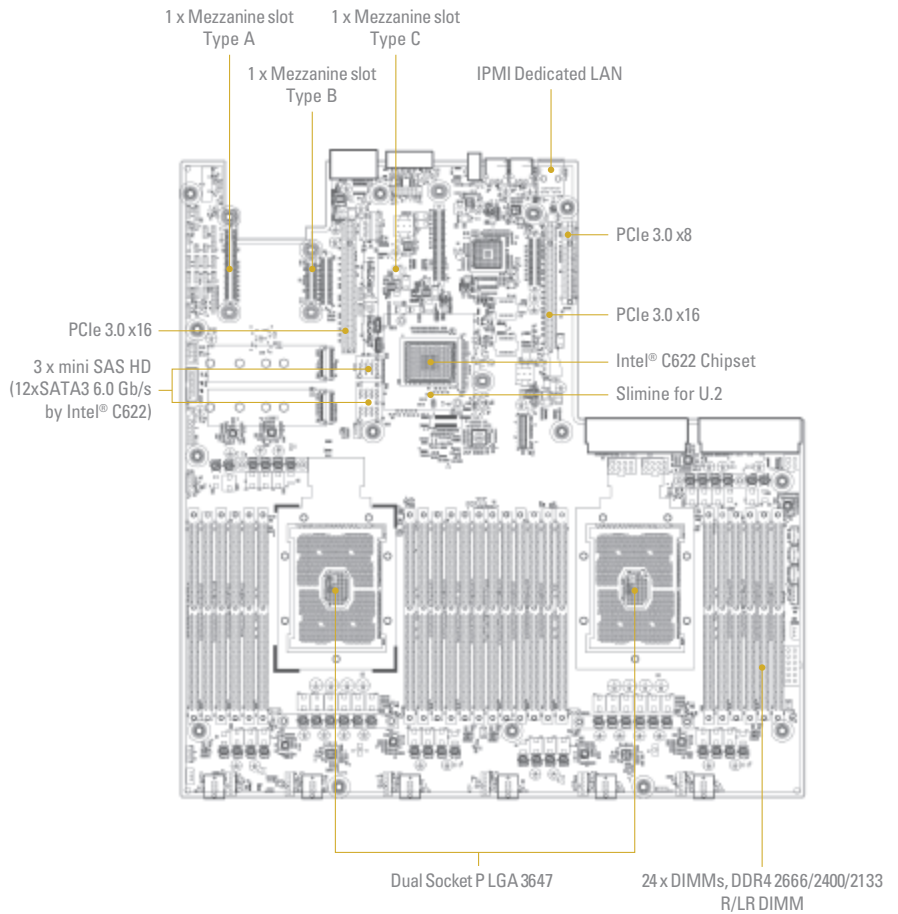
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L shape



Application

- Enterprise Mission Critical Application
- Datacenter Computing or Virtualization Server
- E-commerce
- Virtualization

		EP2C622D24LM
Form Factor		L shape(16.7" x17")
Processor Support		Dual Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Max 205W)
Chipset		Intel® C622
Memory		Six Channel, 24 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel C622 : 14 SATA3(including 2x M.2 ports or 2x SATA DOM)
	Additional	N/A
	Slimline for U.2	1 x8 from CPU1 (support QAT2 by cable to PCH miniSAS HD)
Expansion Slots		2 x PCIe 3.0 x16, 1 x PCIe 3.0 x8
Ethernet	LAN Controller	N/A
	LAN Port	RJ45:1(IPMI)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ikmv, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0, 2 via header)
Mezzanine		2x Mezzanine Type A(1x for OCP LAN, 1x for Storage), 1x Mezzanine Type B, 1x Mezzanine Type C

• Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M540R, M3008S, M3108, M3008(only for board level)
 • Compatible Mezzanine Type C: MP-557R2, MP-4223R4, MP-4227R2, MP-1543R4



EP2C622D16FM



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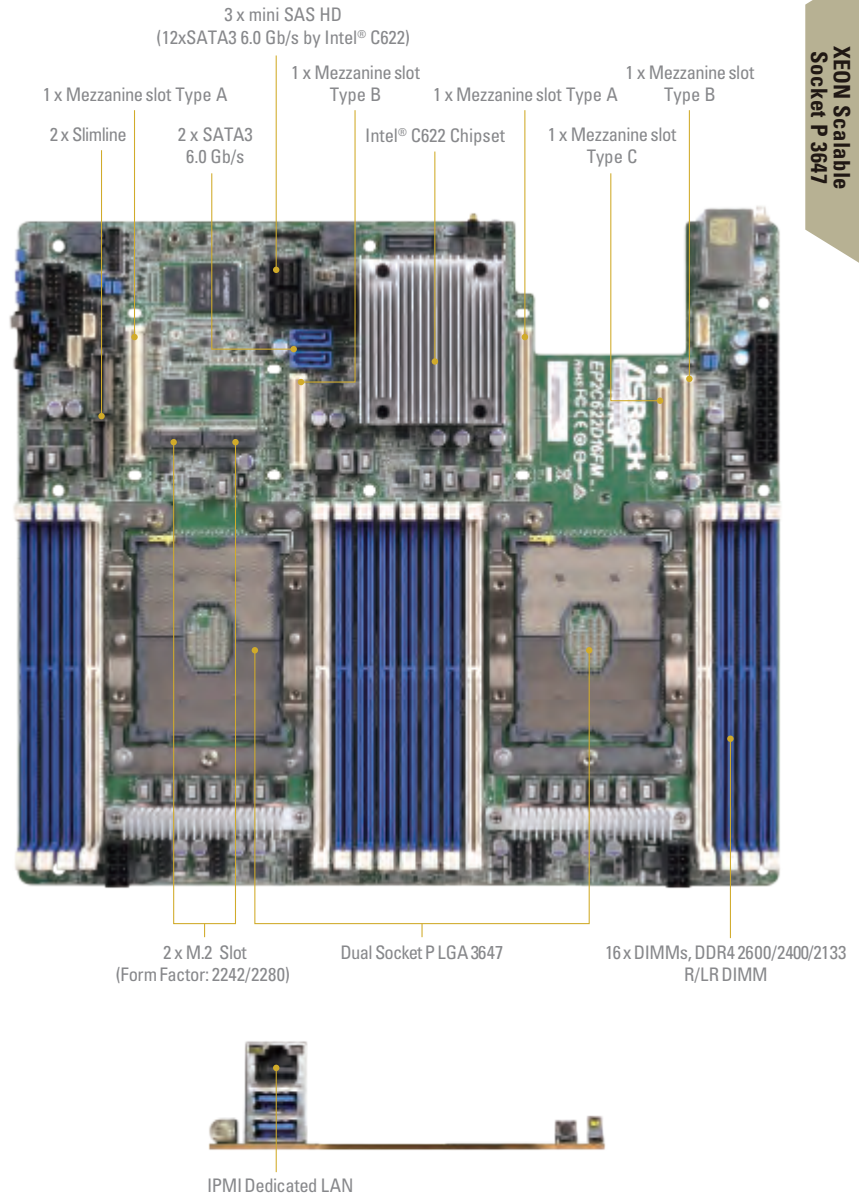
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Front I/O

Application

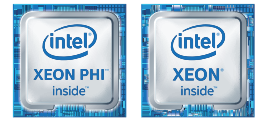
- HPC Application
- Scientific Computing
- Real-time Finance
- Research & Labs



XEON Scalable
Socket P 3647

		EP2C622D16FM
Form Factor		SSI CEB(12" x10.5")
Processor Support		Dual Socket P LGA 3647 support Intel® Xeon® Scalable Processors (Max 205W: design ready)
Chipset		Intel® C622
Memory		Six Channels, 16 DIMMs, DDR4 2666/2400/2133 RDIMM and LR DIMM
Storage	Intel PCH	Intel C622 : 14 x SATA3 6.0 Gb/s (12 from 3 x mini SAS connector + 2 x SATA connector +2 x M.2 ports from PCH) 2 x M.2 slot is shared with the 2 x SATA connector.
	Additional	N/A
Expansion Slots		2 x PCIe 3.0 x16, 2 x Slimline Connector x8, 2 x M.2 ports from PCH(PCIe x2 or SATA3)
Ethernet	LAN Controller	N/A
	LAN Port	RJ45:2+1(IPMI)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ikm, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		2 (from rear I/O)
Mezzanine		2x Mezzanine Type A(1x for OCP LAN, 1x for Storage) 1x Mezzanine Type B, 1x Mezzanine Type C

• Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M3008S(only for board level)
• Compatible Mezzanine Type C: MP-557R2, MP-4223R4, MP-4227R2, MP-1543R4



X200D6HM2



DDR4

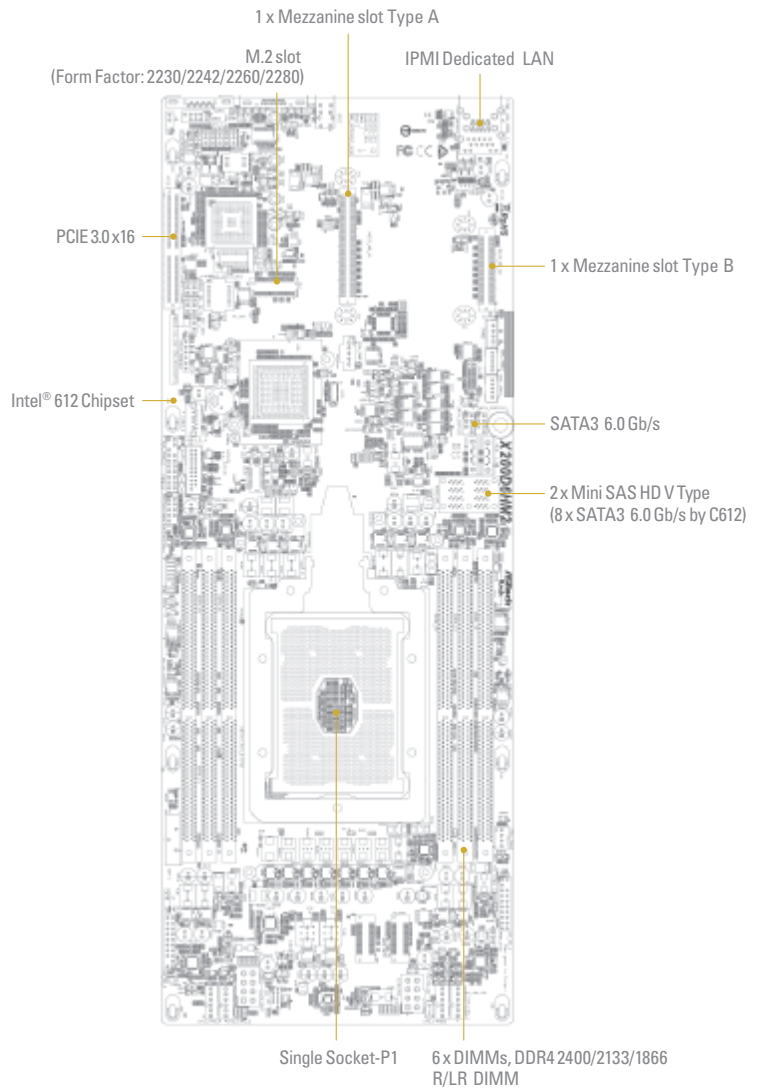


Half-width



Mezz Slot

Xeon Phi Socket-P1



Application

- High Performance Computing Node
- Designed for 4 of Computing Node in 2U Chassis
- Customized Blade-type Server
- Machine Learning / Deep Learning
- Big Data Analysis / Life Science / Research / Rendering

		X200D6HM2
Form Factor		Half Width (16" x 6.5")
Processor Support		Single socket-P1 support Intel® Xeon Phi X200 series
Chipset		Intel® C612
Memory		6 DIMM, DDR4 2400/2133/1866 RDIMM and LR DIMM
Storage	Intel PCH	10x SATA3 + 4xsATA by Intel® C612 (1X2 MiniSAS HD V type, 1 SATA 7P + 1 SATA 7p share to M.2)
	Additional	
Expansion Slots		1 x PCIe 3.0 x16
Ethernet	LAN Controller	N/A
	LAN Port	RJ45:1(IPMI)
System management	BMC Controller	ASPEED 2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0)
Mezzanine		1 x Type Am 1 x Type B
M.2		1 (Form Factor: 2230/2242/2260/2280)

• Compatible Mezzanine Type A: Compatible Mezzanine Type A: M350, M540, M599, M710, M350R, M540R, M599R, M3008S(only for board level)



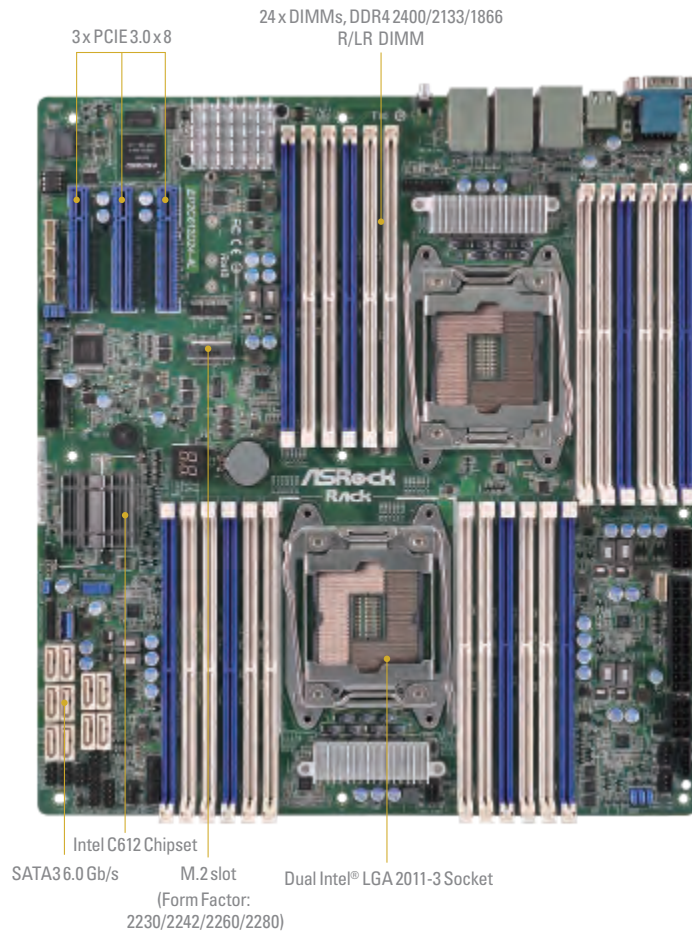
EP2C612D24-4L



2011-R3



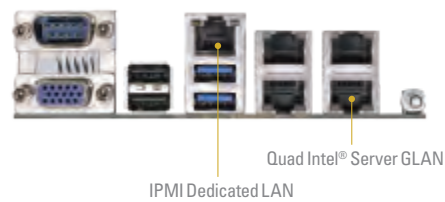
DDR4



Grantley
Socket 2011-3

Application

- Application / Mission Critical / Database or Hadoop Server with SSD Acceleration.
- I/O Virtualization (Better Performance by 24DIMMs and 4 LANS)
- High Performance Database Server(10 SATAs)



		EP2C612D24-4L
Form Factor		SSI EEB(12"x13")
Processor Support		Dual Socket LGA 2011 R3 support Intel® Xeon processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		24 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM
Storage	Intel PCH	10 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)
	Additional	
Expansion Slots		3 x PCIe 3.0 x8, 1 x M.2
Ethernet	LAN Controller	4 x Intel® i350 AM4 RJ45:4+1(IPMI)
	LAN Port	
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		4(2 from rear I/O, 2 via header)



EP2C612D8C



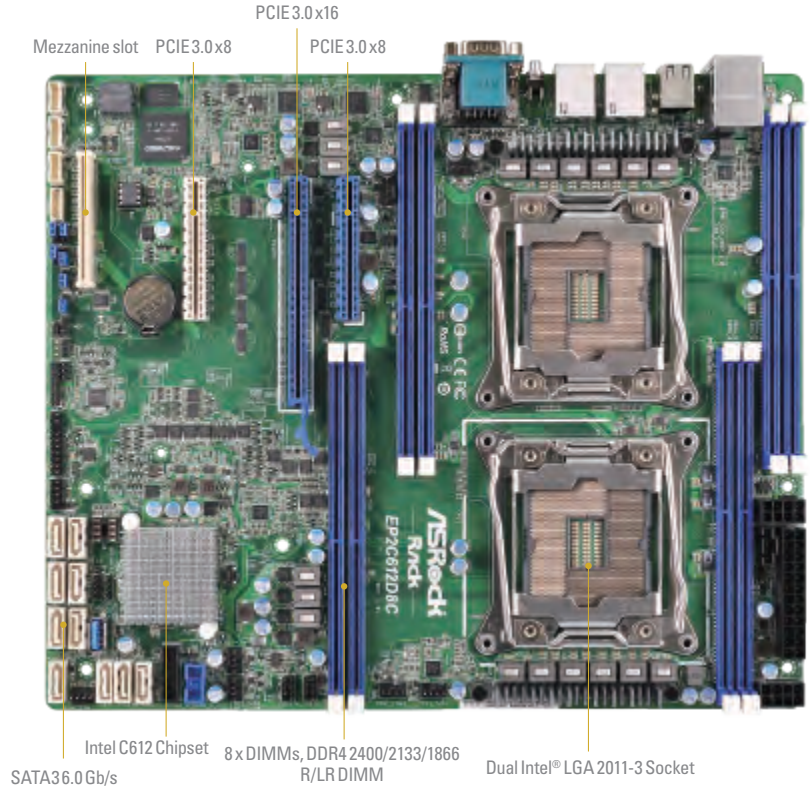
Granley Socket 2011-3



2011-R3



DDR4



Application

- Storage Server
- High Performance Tower Enterprise Server



IPMI Dedicated LAN Dual Intel® Server GLAN

		EP2C612D8C
Form Factor		ATX(12"x10")
Processor Support		Dual Socket LGA 2011 R3 support Intel® Xeon processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		8 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM
Storage	Intel PCH	10 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)
Expansion Slots		1 x PCIe 3.0 x16, 2 x PCIe 3.0 x8 (PCI E2, PCI E3: x8/x8 or x16/x0 mode, PCI E5, PCI E7: x8/x0 share with Mezz)
Ethernet	LAN Controller LAN Port	2 x Intel® i210 RJ45:2+1(IPMI)
System management	BMC Controller IPMI dedicated GLAN	ASPEED AST2400 Realtek RTL8211E
USB 3.0		4(2 from rear I/O, 2 via header)
Mezzanine		1x8 Storage Mezzanine Card (M3008 or M3108)



EP2C612D16-2L2T



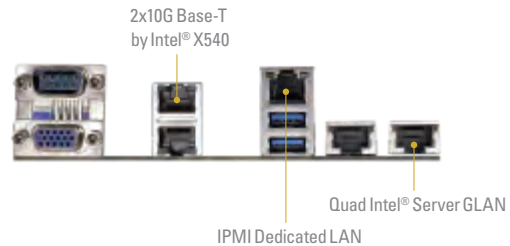
2011-R3



Thunderbolt Card Ready



DDR4



Application

- Application / Mission Critical / Database or Hadoop Server with SSD Acceleration / IPTV and Video Stream Machine.
- I/O Virtualization (Better Performance by 16 DIMMs and 4 LANs)
- High Performance Storage Server (12 SATAs)

		EP2C612D16-2L2T
Form Factor		SSI EEB(12"x13")
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		Quad Channel, 16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM
Storage	Intel PCH	Intel® C612: 10 x SATA3 6.0 Gb/s (support RAID 0, 1, 5, 10)
	Additional	Marvell 9172: 2 x SATA3 6Gbps
Expansion Slots		3 x PCIe 3.0 x16, 3 x PCIe 3.0 x8 (PCIe1, PCIe2, PCIe3, PCIe4: x16/x0/x16/x0 or x8/x8/x8/x8)
Ethernet	LAN Controller	1 x Intel® X540(Support 2x10G Base-T), 2 x Intel® i210
	LAN Port	RJ45:4+1(for IPMI 2.0)
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E
Thunderbolt ready		Thunderbolt AIC Connector



EP2C612D16C-4L



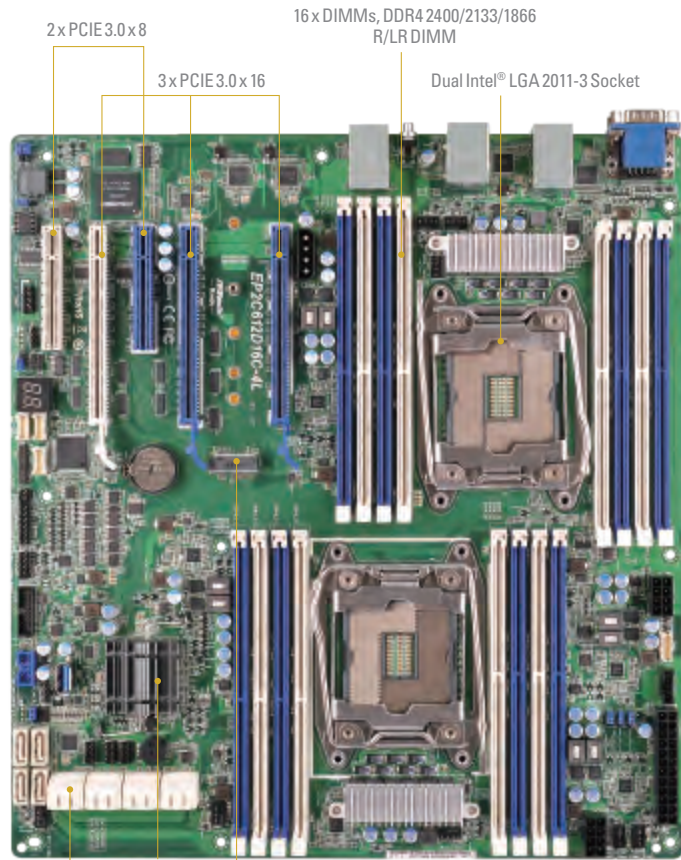
Grandley Socket 2011-3



2011-R3



DDR4



SATA3 6.0 Gb/s

M.2 slot (Form Factor: 2230/2242/2260/2280)

Intel C612 Chipset

Application

- Virtualization Server (Better Performance by 16 DIMMs and 4 LANs)
- Application / Mission Critical / Database or Hadoop Server with SSD Acceleration.
- High Performance Storage Server (12 SATAs)



Quad Intel® Server LAN
IPMI Dedicated LAN

		EP2C612D16C-4L
Form Factor		SSI EEB(12"x13")
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		Quad Channel, 16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM
Storage	Intel PCH	10 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)
	Additional	2 x SATA3 6Gb/s by Marvell 9172
Expansion Slots		3 x PCIe 3.0 x16, 2 x PCIe 3.0 x8, 1 x M.2 slot (PCIe1, PCIe2, PCIe3, PCIe4: x8/x8/x8/x8 or x16/x0/x16/x0)
Ethernet	LAN Controller	4 x Intel® i210
	LAN Port	RJ45:4+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E



EP2C612D16NM-2T8R

EP2C612D16NM-8R

EP2C612D16NM



2011-R3



DDR4



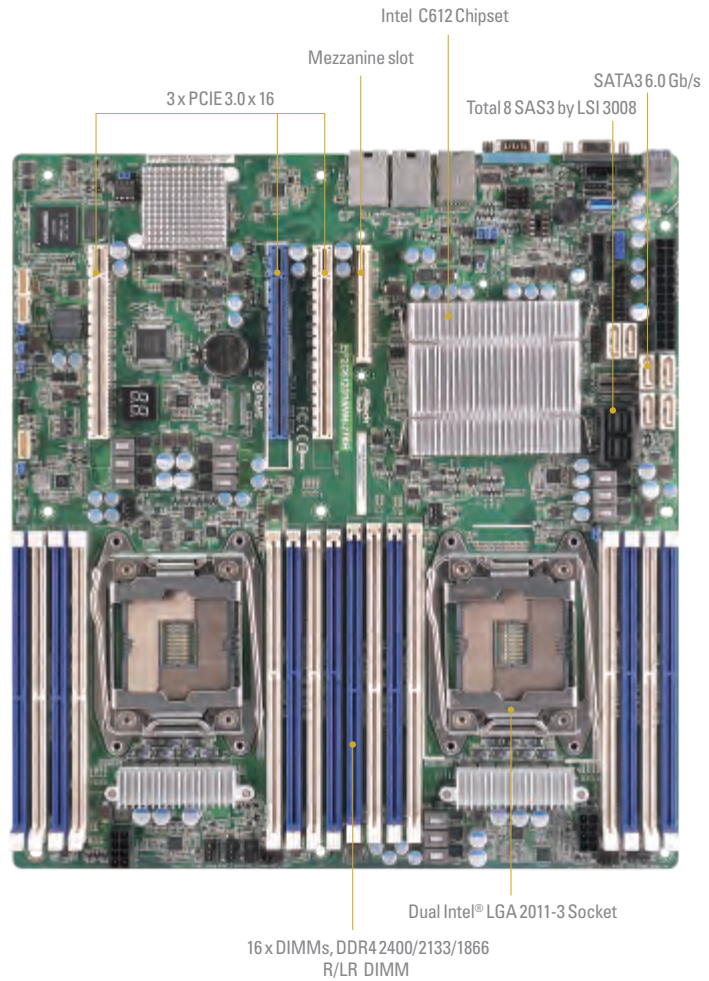
2 Full-High Card Supported in 1U

Application

- High Performance and High-Density HPC
- Application / Mission Critical / Database or Hadoop Server with SSD Acceleration.
- I/O Virtualization
- High Performance Storage Server

SKU Option

	EP2C612D16NM	EP2C612D16NM-8R	EP2C612D16NM-2T8R
LSI 3008	N/A	V	V
10GLAN	N/A	N/A	2



		EP2C612D16NM	EP2C612D16NM-8R	EP2C612D16NM-2T8R
Form Factor		SSI EEB(12"x13")		
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series		
Chipset		Intel® C612		
Memory		16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM		
Storage	Intel PCH	10 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)		
	Additional	N/A	LSI 3008: 8-port SAS3 (from 2 x mini SAS HD connector)	LSI 3008: 8-port SAS3 (from 2 x mini SAS HD connector)
Expansion Slots		3 x PCIe 3.0 x16		
Ethernet	LAN Controller	2 x Intel® i350		1 x Intel® X540 (Support 2x10G Base-T)
	LAN Port	RJ45:2+1(IPMI 2.0)		
System management	BMC Controller	ASPEED AST2400		
	IPMI dedicated GLAN	Realtek RTL8211E		
Mezzanine		1 x8 Mezzanine card to support 2 x10G Ethernet(copper or optics)		



EP2C612D16FM2

Grandley Socket 2011-3



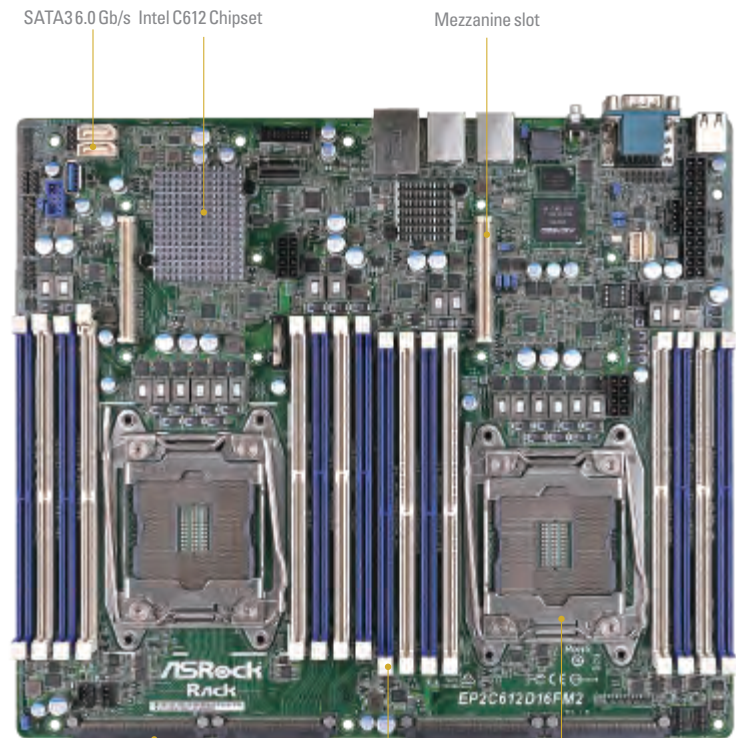
2011-R3



Front I/O

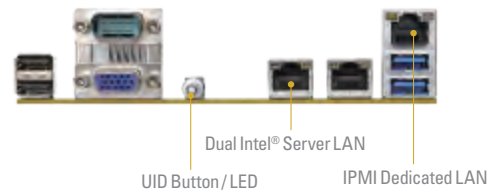


DDR4



Application

- High Performance Server
- Multi-Application Server (with Front PCI-E Design)
- High-density CPU Rendering Machine
- Scale-out HPC Platform



		EP2C612D16FM2
Form Factor		SSI CEB (12" x 10.5")
Processor Support		Dual Socket LGA 2011 R3 support Intel® Xeon processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		Quad Channel, 16 DIMM, DDR4 2400/133/1866 RDIMM and LR DIMM
Storage	Intel PCH	Intel® C612: 6 x SATA3 6.0 Gb/s (4 from 1 mini SAS connector + 2x SATA3 connector)(support RAID0, 1, 5, 10)
	Additional	N/A
Expansion Slots		Supports Fronts Right Angle 2x16 from each CPU to Midplane, total 4x16(need to bundle with ASRock Rack system board)
Ethernet	LAN Controller	2x Intel® i350
	LAN Port	RJ45:2+1(IPMI)
System management	BMC Controller	ASPEED 2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0, 2 via header)
Mezzanine		2 x 8 Mezzanine slot support mezzanine card (with 2 X40G Ethernet or 2 x10G Ethernet or 2 xGLAN(2x 40G SFP28 by Mellanox MT27712A0-FDCF-AE or 2x 10G Base-T by Intel® X540 or 2x SFP+ by Intel® 82599ES or 2 x GLAN by Intel® i350)



EP2C612D16FM

EP2C612D16FM-N



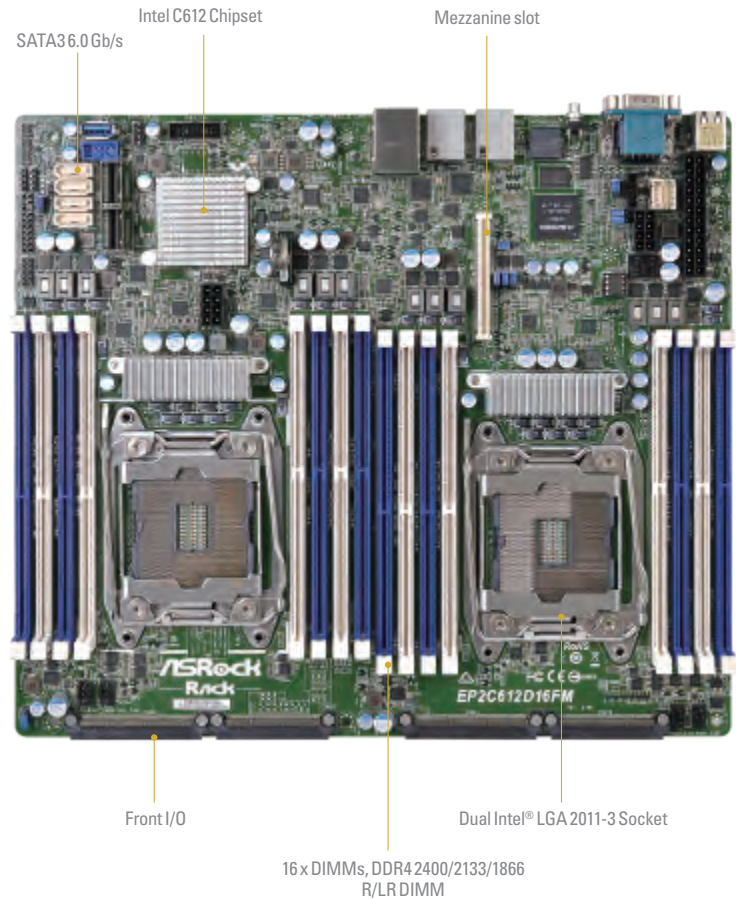
2011-R3



Front I/O



DDR4



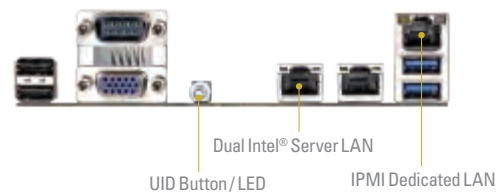
Grantley Socket 2011-3

Application

- High Performance Server
- Multi-Application Server (with Front PCIe Design)
- High-density CPU Rendering Server

SKU Option

	EP2C612D16FM	EP2C612D16FM-N
Front PCIe	4	N/A



	EP2C612D16FM	EP2C612D16FM-N
Form Factor	SSI CEB(12"x10.5")	
Processor Support	Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series	
Chipset	Intel® C612	
Memory	Quad Channel, 16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM	
Storage	Intel PCH	Intel® C612: 10 x SATA3 6.0 Gb/s (8 from 2 mini SAS connector + 2x SATA3 connector) (support RAID 0, 1, 5, 10)
	Additional	
Expansion Slots	Supports Front Right Angle 2x16 from each CPU to Midplane, total 4x16 (need to bundle with ASRock Rack system board)	
Ethernet	LAN Controller	2 x Intel® i210
	LAN Port	RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E
Mezzanine	1 x8 Mezzanine card to support 2 x 10G Ethernet(copper or optics)	
Front PCIe	4	N/A



EP2C612D16SM-2T

EP2C612D16SM



Granley Socket 2011-3



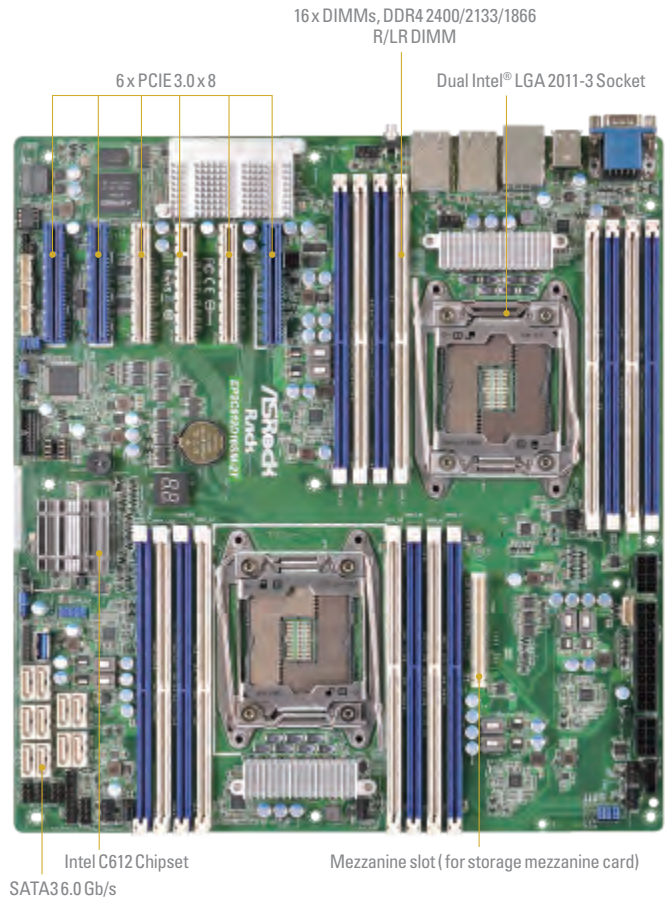
2011-R3



Storage Mezzanine Optimized



DDR4

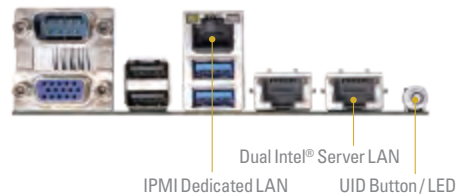


Application

- High Performance Storage Server Supports Storage Mezzanine Cards
- Multi-Display Application
- Firewall Application Rackmount

SKU Option

	EP2C612D16SM	EP2C612D16SM-2T
10GLAN	N/A	V



		EP2C612D16SM	EP2C612D16SM-2T
Form Factor		SSI EEB(12"x13")	
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series	
Chipset		Intel® C612	
Memory		Quad Channel, 16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM	
Storage	Intel PCH	Intel® C612: 10 x SATA3 6.0 Gb/s (support RAID 0, 1, 5, 10)	
	Additional	N/A	
Expansion Slots		6 x PCIe 3.0 x8	
Ethernet	LAN Controller	1 x Intel® i350	1 x Intel® X540(Support 2x10G Base-T)
	LAN Port	RJ45:2+1(IPMI 2.0)	RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400	
	IPMI dedicated GLAN	Realtek RTL8211E	
Mezzanine		1 (x8 Storage Mezzanine card-M3008)	



EP2C612D8-2T8R

EP2C612D8-8R

EP2C612D8



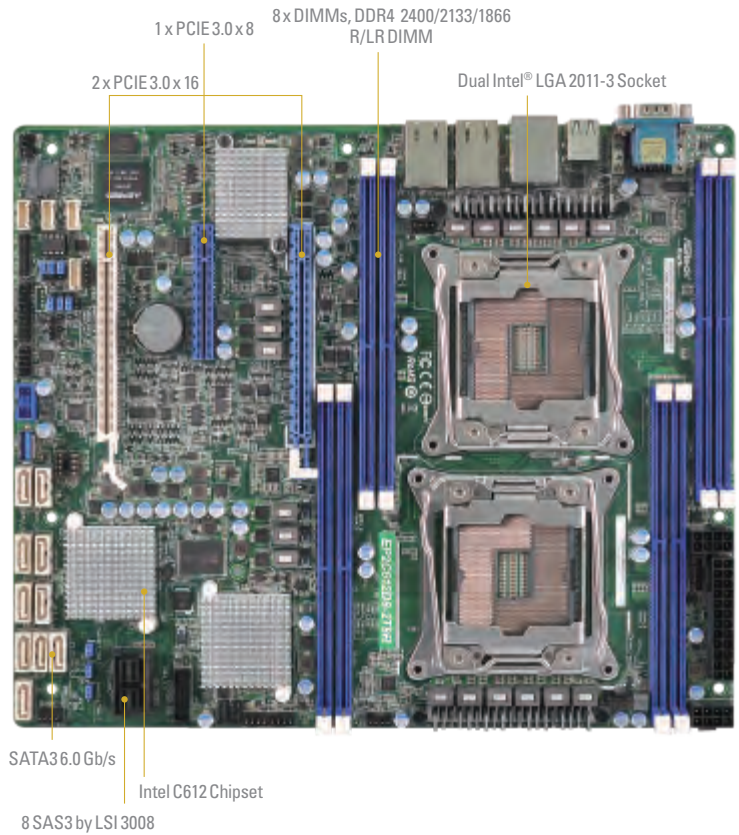
2011-R3



DDR4



SAS3 12Gb/s



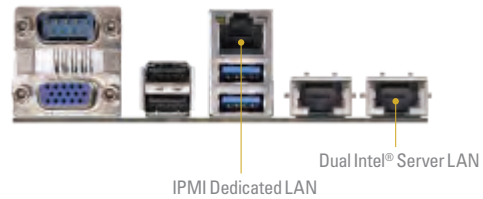
Grantley
Socket 2011-3

Application

- Application / Mission Critical / Database or Hadoop Server with SSD Acceleration.
- Compact Storage Server
- Tower Enterprise Server

SKU Option

	EP2C612D8	EP2C612D8-8R	EP2C612D8-2T8R
LSI 3008	N/A	V	V
10GLAN	N/A	N/A	2



		EP2C612D8	EP2C612D8-8R	EP2C612D8-2T8R
Form Factor		ATX(12"x10")		
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series		
Chipset		Intel® C612		
Memory		Quad Channel, 8 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM		
Storage	Intel PCH	Intel® C612: 10 x SATA3 6.0 Gb/s (support RAID 0, 1, 5, 10)		
	Additional	N/A	LSI 3008: 8-port SAS3(from 2 x mini SAS HD connector)	
Expansion Slots		2 x PCIe 3.0 x16, 1 x PCIe 3.0 x8 (PCIe3, PCIe4, PCIe5, PCIe5: x8/x8/x8/x8, x16/x0/x16/x0)		
Ethernet	LAN Controller	1 x Intel® i350		1 x Intel® X540(Support 2x10G Base-T)
	LAN Port	RJ45:2+1(IPMI 2.0)		RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400		
	IPMI dedicated GLAN	Realtek RTL8211E		



OCP-C612HM



Granley Socket 2011-3



2011-R3



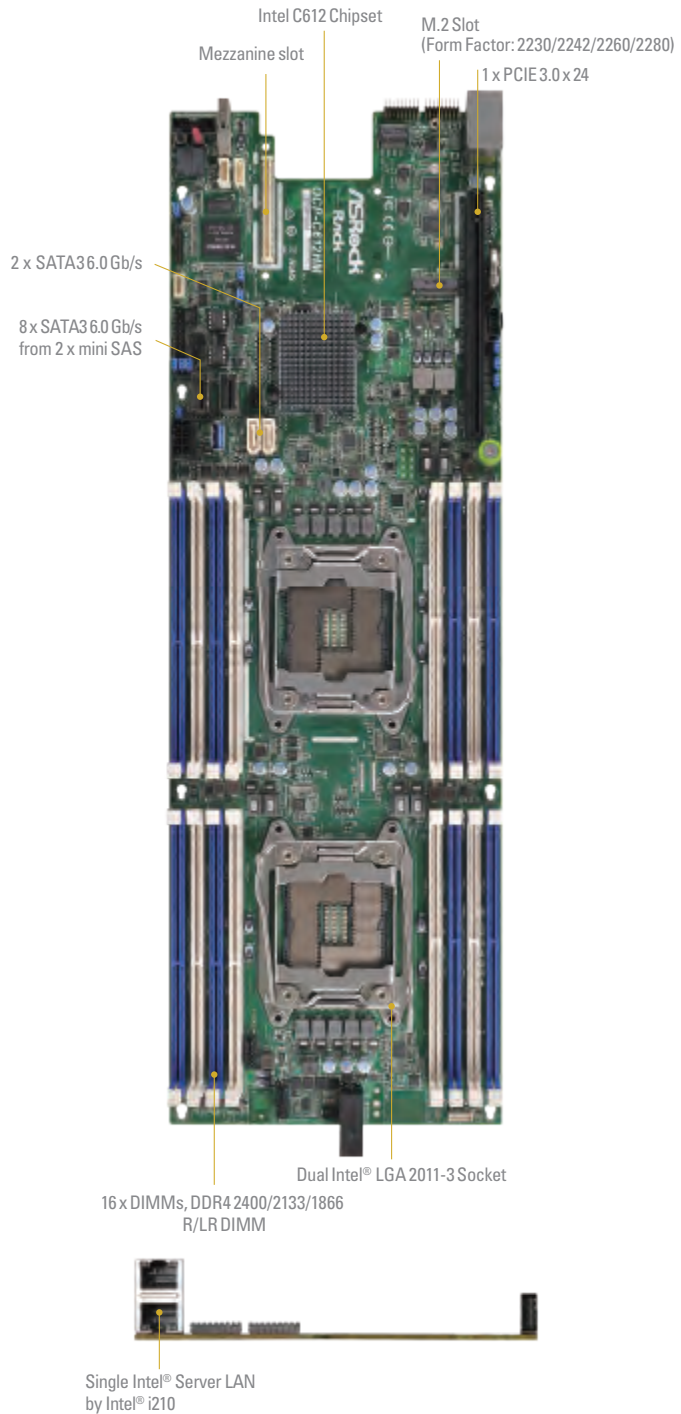
1U/2U High Density Storage



DDR4

Application

- High Performance Computing Nodes with Excellent I/O Flexibility
- Design for Service and Design for Manufacturing



		OCP-C612HM
Form Factor		Half Width (20" x 6.5")
Processor Support		support Intel® Xeon® E5-2600 v3&v4 Series ProcessorS
Memory		16 DIMM, DDR4 2400/133/1866 RDIMM and LR DIMM
Storage	Intel PCH	10 x SATA3 ((2 MiniSAS, 2 SATA, 1 to mSATA*)) by Intel® C612
	Additional	*The M.2 slot is shared with the SATA_4 connector 2 X OcuLink (PCIe X8 from CPU)
Expansion Slots		1 x PCIe 3.0 x24
Ethernet	LAN Controller	Intel® i210
	LAN Port	RJ45:2
System management	BMC Controller	ASPEED 2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		5(1 from rear I/O, 1 Type A USB 3.0)



EP2C612D16HM-2T

EP2C612D16HM



2011-R3



1U/2U High Density Storage



DDR4

Application

- High Performance Computing Node
- Virtualization Server
- DPI Server / Internet Security

SKU Option

	EP2C612D16HM	EP2C612D16HM-2T
10GLAN	N/A	V

Mezzanine slot
SATA3 6.0 Gb/s
M.2 Slot (Form Factor: 2230/2242/2260/2280)
Intel C612 Chipset
1 x PCIe 3.0 x 16



Dual Intel® LGA 2011-3 Socket
16 x DIMMs, DDR4 2400/2133/1866 R/LR DIMM



		EP2C612D16HM	EP2C612D16HM-2T
Form Factor		Half-Width(6.5"×18.6")	
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series	
Chipset		Intel® C612	
Memory		Quad Channel, 16 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM	
Storage	Intel PCH	Intel® C612: Supports 10 x SATA3 6.0 Gb/s (8 from mini SAS HD connector) (support RAID 0, 1, 5, 10)	
	Additional	N/A	
Expansion Slots		1 x PCIe 3.0 x16, 1 x M.2 slot	
Ethernet	LAN Controller	1 x Intel® i350	1 x Intel® X540(Support 2x10G Base-T)
	LAN Port	RJ45:2+1(IPMI 2.0)	RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400	
	IPMI dedicated GLAN	Realtek RTL8211E	
Mezzanine		1 x8 Mezzanine card to support 2 x 10G Ethernet(copper or optics)	



EP2C612D8HM



Grandley Socket 2011-3



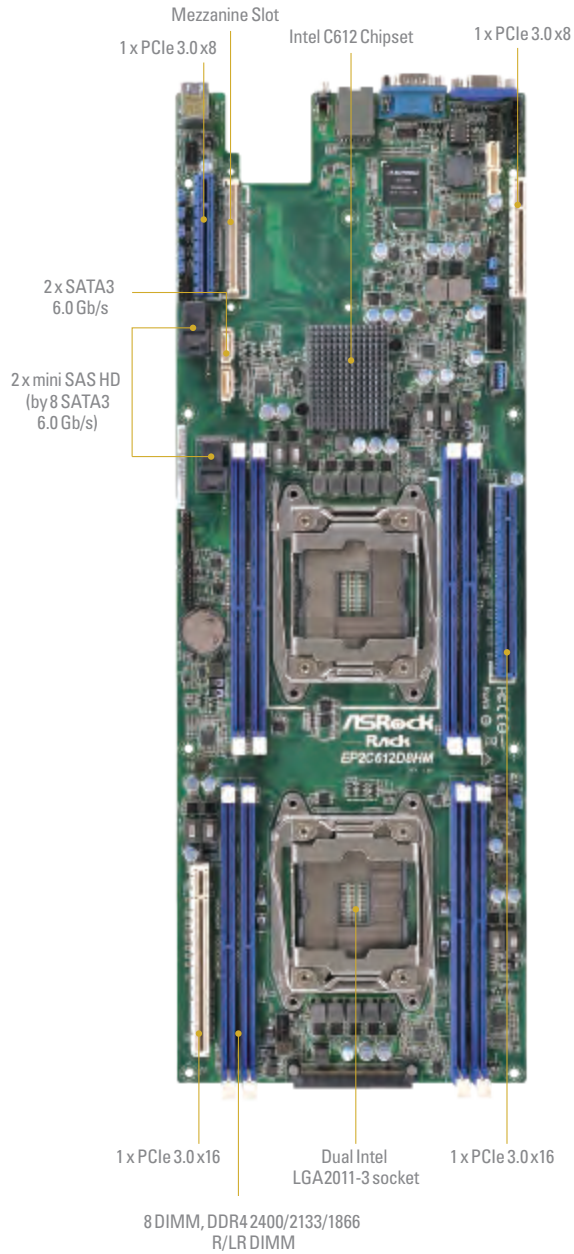
2011-R3



Half-width



DDR4



Application

- High-performance Computing Nodes
- GPU Server
- Virtual Desktop
- Graphic Workstation

		EP2C612D8HM
Form Factor		Half Width (18.6" x 6.5")
Processor Support		support Intel® Xeon processor E5-2600 v3/v4 series
Memory Capacity		8 DIMM, DDR4 2400/2133/1866 RDIMM and LR DIMM
Storage Capacity	Intel PCH	10 x SATA3 (8 from 2x mini SAS HD connector) by Intel® C612
	Additional	N/A
Expansion Slots		2 x PCIe 3.0 x16, 2 x PCIe 3.0 x8
Ethernet	LAN Controller	Marvell 88E1543(4L)
	LAN Port	RJ45:1(IPMI)
System management	BMC Controller	ASPEED 2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		5(2 from rear I/O, 1 Type A USB 3.0, 2 via header)



EPC612D8A

EPC612D8



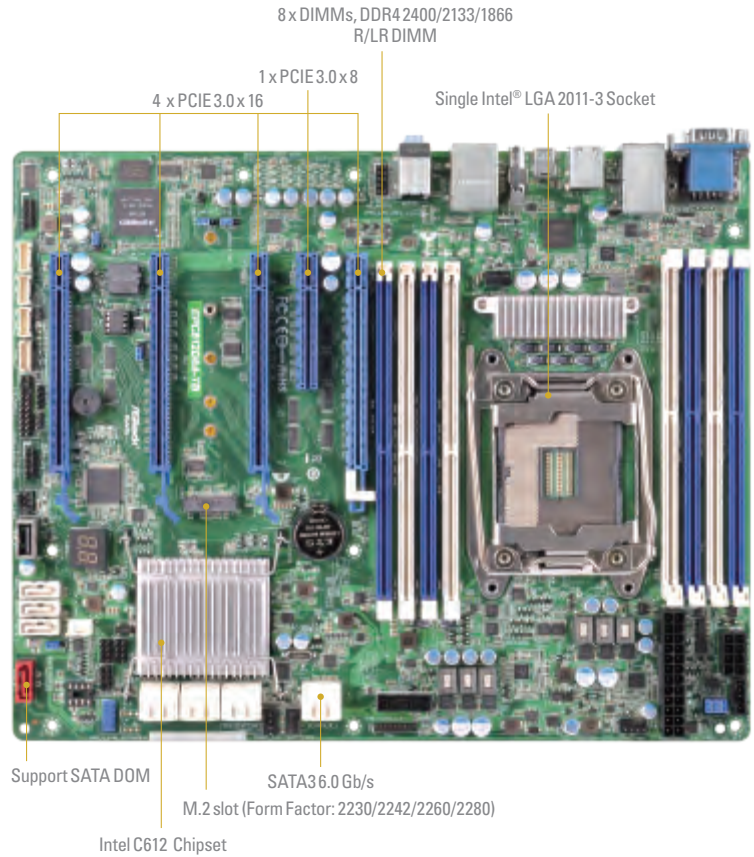
2011-R3



Thunderbolt on Board



DDR4



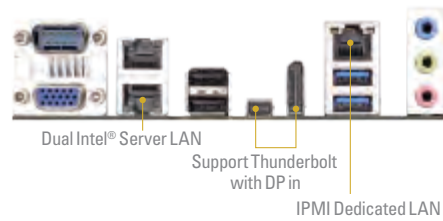
Grantley Socket 2011-3

Application

- UP Solution for Application Server
- High End Workstation
- GPGPU Server
- Multi-Display server

SKU Option

	EPC612D8	EPC612D8A
Thunderbolt	N/A	N/A
Audio	N/A	V



		EPC612D8	EPC612D8A
Form Factor		ATX (12"x9.6")	
Processor Support		Single Socket LGA 2011 R3 Support Intel® Xeon Processor E5-1600/2600 v3/v4 series	
Chipset		Intel® C612	
Memory		Quad Channel, 8 DIMM, DDR4 2400/2133/1866 R DIMM and LR DIMM	
Storage	Intel PCH	Intel® C612: 10 x SATA3 6.0Gb/s (1 support SATA DOM) (support RAID 0, 1, 5, 10)	
	Additional	Marvell 9172: 2 x SATA3 6Gb/s	
Expansion Slots		4 x PCIe 3.0 x16(PCIE1/PCIE3: x16x0 or x8/x8, PCIE5/PCIE7: x16/x0 or x8/x8), 1 x PCIe 3.0 x8(PCIE4: x8 or x4 with mini PCIe x4), 1 x mini PCIe x4 ((support M.2 (Full and Half size))	
Ethernet	LAN Controller	1 x Intel® i210 + 1 x Intel® i217LM	
	LAN Port	RJ45:2+1(IPMI 2.0)	
System management	BMC Controller	ASPEED AST2400	
	IPMI dedicated GLAN	Realtek RTL8211E	
Thunderbolt ready		N/A	



EP2C612 WS



Grandley Socket 2011-3



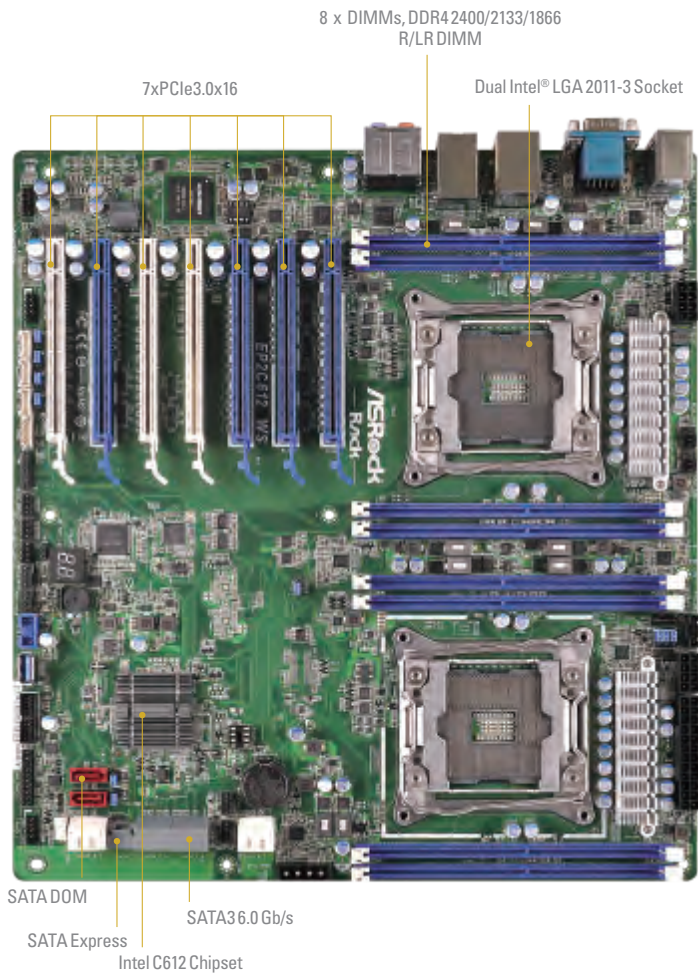
2011-R3



Workstation



GPGPU



Application

- Graphic Server
- Visual Computing Server
- Rendering Server
- 4U Pedestal (Rackable) Server

		EP2C612 WS
Form Factor		SSI EEB(12"x13")
Processor Support		Dual Socket LGA 2011 R3 Support Intel® Xeon Processor E5-2600 v3/v4 series
Chipset		Intel® C612
Memory		Quad Channel, 8 DIMM, DDR4 2400/2133/1866 R DIMM, LR DIMM
Storage	Intel PCH	10 x SATA3 6.0 Gb/s by Intel® C612(including 1 x SATA Express and 2 SATA DOM) (support RAID 0, 1, 5, 10)
	Additional	N/A
Expansion Slots		7xPCIe3.0x16 (PCIe3, PCIe4: x16/x0 or x8/x8 ; PCIe6, PCIe7: x0/x16 or x8/x8 mode)
Ethernet	LAN Controller	2 x Intel® i210
	LAN Port	RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E



EPC612D4U-2T8R

EPC612D4U-8R

EPC612D4U



2011-R3



SAS3 12Gb/s



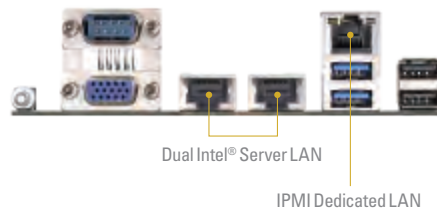
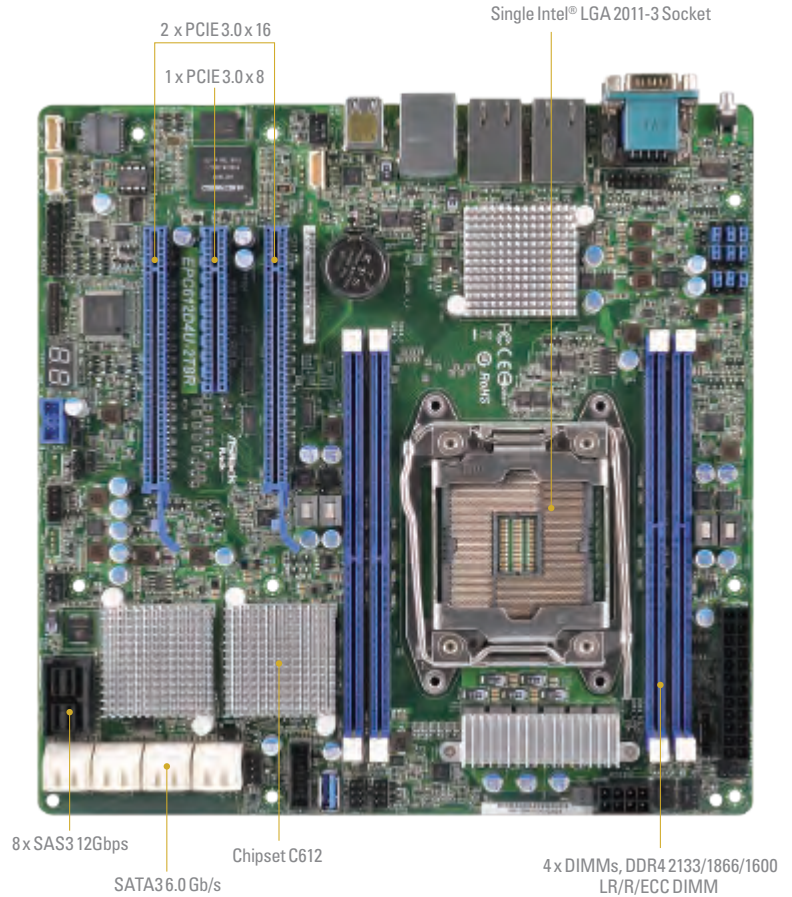
Storage

Application

- Hi-Speed Multi-Function Storage Server
- Telecom and IPC Server
- Web 2.0 Storage Server

SKU Option

	EPC612D4U	EPC612D4U-8R	EPC612D4U-2T8R
LSI 3008	N/A	V	V
10GLAN	N/A	N/A	2



Grantley
Socket 2011-3

		EPC612D4U	EPC612D4U-8R	EPC612D4U-2T8R
Form Factor		uATX(9.6"x9.6")		
Processor Support		Single Socket LGA 2011 R3 Support Intel® Xeon Processor E5-1600/2600 v3/v4 series		
Chipset		Intel® C612		
Memory		Quad Channel, 4 DIMM, DDR4 2400/2133/1866/1600 R DIMM and LR DIMM		
Storage	Intel PCH	8 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)		
	Additional	N/A	LSI 3008: 8-port SAS3(from 2 x mini SAS HD connector)	LSI 3008: 8-port SAS3(from 2 x mini SAS HD connector)
Expansion Slots		2 x PCIe 3.0 x16, 1 x PCIe 3.0 x8 (PCIe1, PCIe2: x16/x0 or x8/x8 mode, PCIe3: x16/x8 switch with LSI3008)		
Ethernet	LAN Controller	1 x Intel® i350	1 x Intel® i350	1 x Intel® X540(Support 2x10GBase-T)
	LAN Port		RJ45:2+1(IPMI 2.0)	
System management	BMC Controller		ASPEED AST2400	
	IPMI dedicated GLAN		Realtek RTL8211E	



EPC612D4I



Granley Socket 2011-3



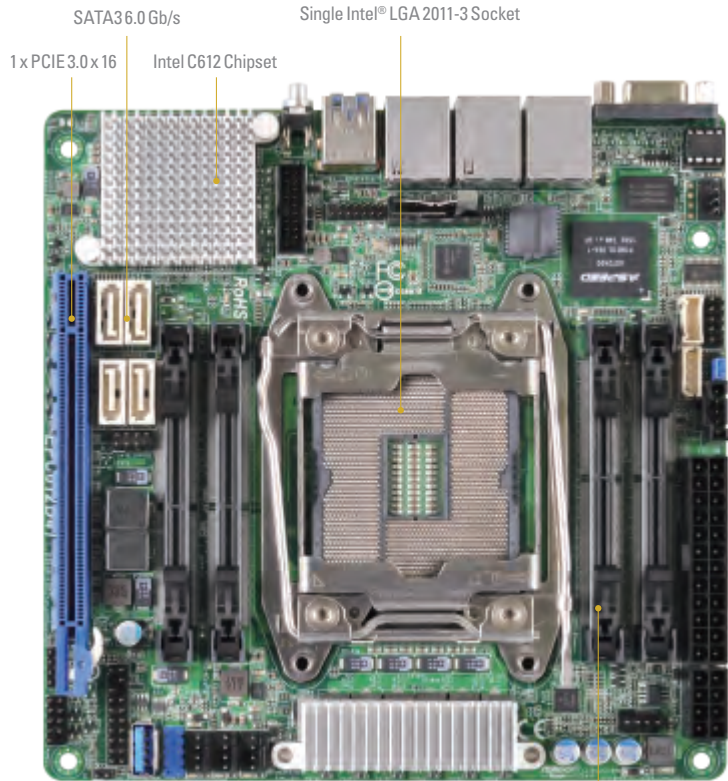
2011-R3



NAS



DDR4
SO DIMM



4 SO DIMMs, DDR4 2400/2133/1866 ECC/ non-ECC DIMM



Intel® i210 + Intel® i217
IPMI Dedicated LAN UID Button/LED

Application

- Mini Server
- Micro Server Mode

		EPC612D4I
Form Factor		Mini ITX(6.7"x6.7")
Processor Support		Single Socket LGA 2011 R3 Support Intel® Xeon Processor E5-1600/2600 v3/v4 series
Chipset		Intel® C612
Memory		4 SO DIMM, DDR4 2400/2133/1866 ECC DIMM, non-ECC DIMM
Storage	Intel PCH	4 x SATA3 6.0 Gb/s by Intel® C612 (support RAID 0, 1, 5, 10)
	Additional	
Expansion Slots		1 x PCIe 3.0 x16
Ethernet	LAN Controller	1 x Intel® i210 + 1 x Intel® i217
	LAN Port	
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E



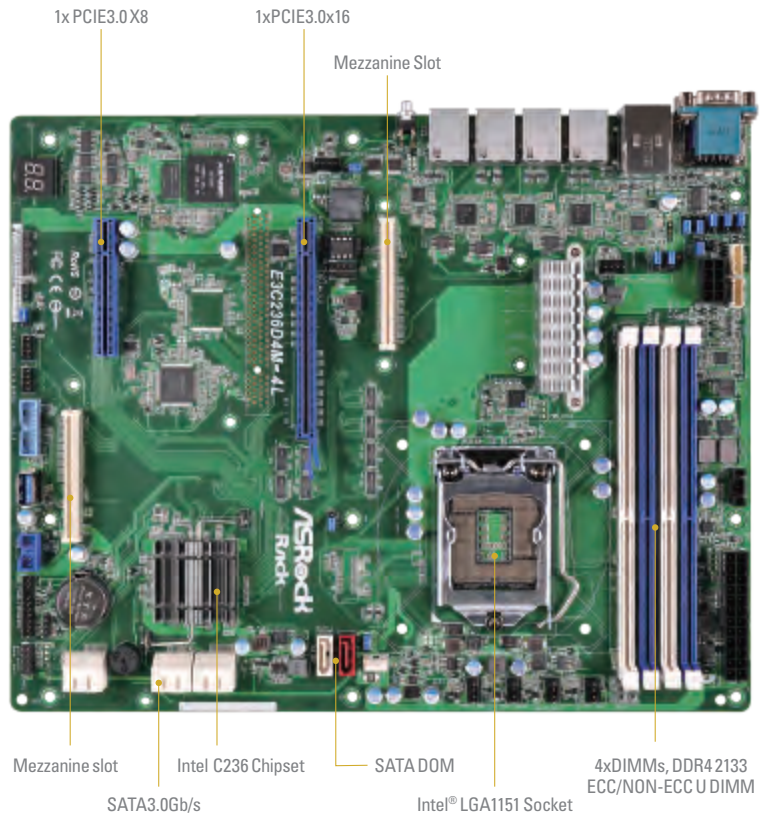
E3C236D4M-4L



1U/2U High Density Storage



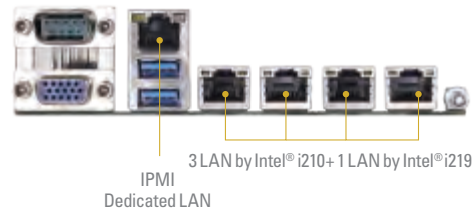
DDR4



Greenlow Socket 1151

Application

- High Density Web Storage Server
- Web 2.0 Storage and Web Convergence Server or Entry Firewall Server
- Video Broadcasting
- Multi-Display Application



		E3C236D4M-4L
Form Factor		ATX(12" x 9.6")
Processor Support		Support Intel® Xeon® E3-1200 v5 Series Processors
Memory		4 DIMM, DDR4 2133 ECC/NON-ECC U DIMM
Storage	Intel PCH	8 x SATA3 6.0 Gb/s by Intel® C236
	Additional	N/A
Expansion Slots		1x PCIe 3.0 x16(PCIE6: x10/x0, x8/x8), 1x PCIe 3.0 x4 (PCIE2)
Ethernet	LAN Controller	3 x RJ45 GLAN by Intel® i210 + 1 x RJ45 GLAN by Intel® i219
	LAN Port	RJ45:3+1(IPMI)
System management	BMC Controller	ASPEED 2400
	IPMI dedicated GLAN	Realtek RTL8211E
USB 3.0		5(2 from rear I/O, 2 via header, 1 from Type A)
USB 2.0		2(2 via header)
Mezzanine		2(1x8 Mezz card supports 10GbE and 1x8 storage mezz M3008)



E3C236D4U

E3C232D4U

E3C232D4U-V1L



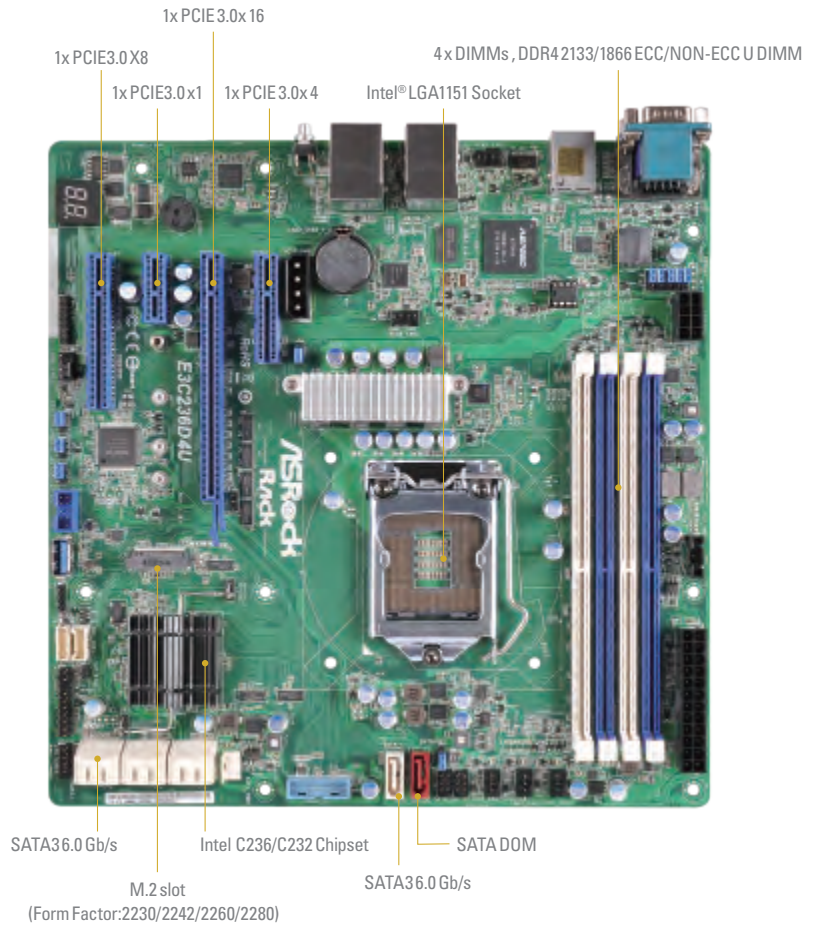
Greenlow Socket 1151



DDR4



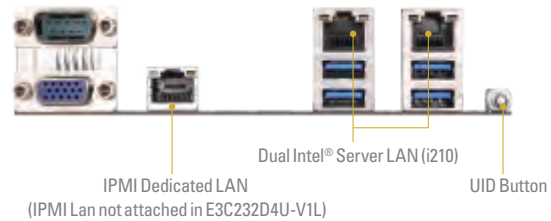
Micro ATX



Application

- **E3C236D4U**
Enterprise and General Purpose Server
- **E3C232D4U-V1L**
Economical Web-Hosting Solution

	E3C236D4U	E3C232D4U	E3C232D4U-V1L
Chipset	C236	C232	C232
Aspeed	AST2400	AST2400	AST1400
LAN	2x GLAN	2x GLAN	1x GLAN



	E3C236D4U	E3C232D4U	E3C232D4U-V1L
Form Factor		Micro ITX(9.6" x 9.6")	
Processor Support	support sIntel® Xeon® E3-1200 v5 Series Processors		
Memory	4 DIMM, DDR4 2133 ECC U DIMM	4 DIMM, DDR4 2133/1866 ECC U DIMM	
Storage	Intel PCH Additional	8 x SATA3 6.0 Gb/s by Intel® C236	6 x SATA3 6.0 Gb/s by Intel® C232 N/A
Expansion Slots	1 x PCIe 3.0 x16, 1 x PCIe 3.0 x8, 1 x PCIe 3.0 x4, 1 x PCIe 3.0 x1		
Ethernet	LAN Controller LAN Port	2 x Intel® i210(Support 2x GLAN) RJ45:2+1(IPMI)	1 x Intel® i210(Support 1x GLAN) RJ45:1
System management	BMC Controller IPMI dedicated GLAN	ASPEED AST2400 Realtek RTL8211E	ASPEED AST1400 N/A
USB 3.0	7(4 from rear I/O, 2 via header, 1 from Type A)		6(4 from rear I/O, 2 via header)
USB 2.0	2(2 via header)		



E3C236D2I

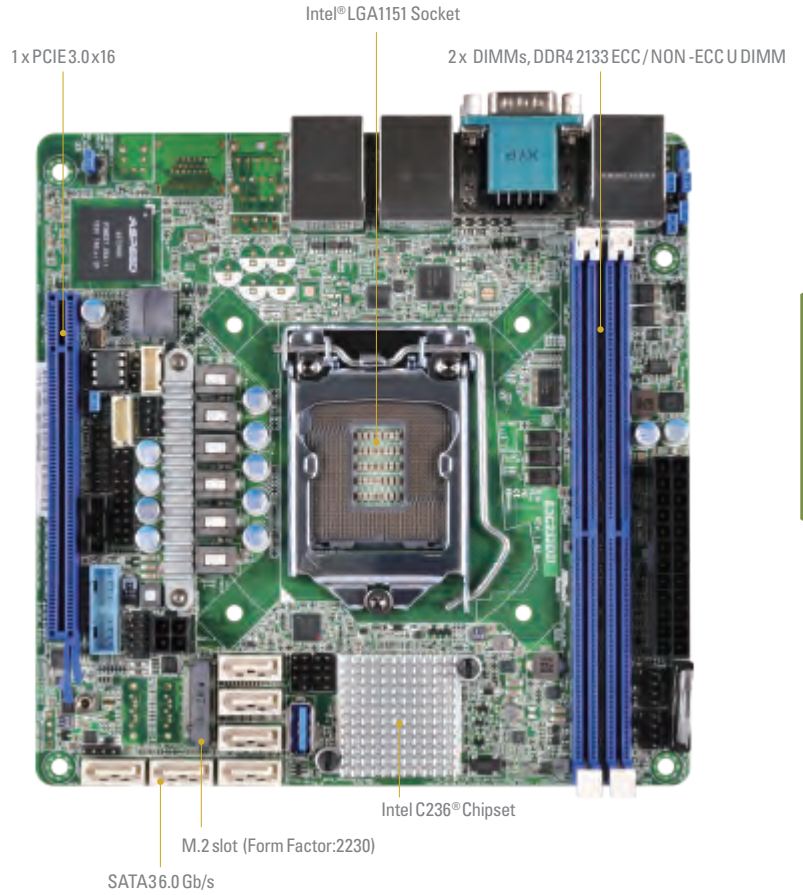
E3C232D2I



NAS



DDR4

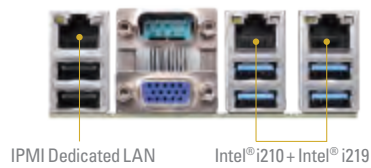


Greenlow Socket 1151

Application

- Enterprise NAS
- Powerful Home Server
- Blade Type Colocation Server Node

	E3C236D2I	E3C232D2I1
Chipset	C236	C232
Type A	USB3.0	USB 2.0



	E3C236D2I	E3C232D2I
Form Factor	Mini ITX(6.7"x 6.7")	
Processor Support	Support Intel® Xeon® E3-1200 v5 Series Processors	
Memory	2 DIMM, DDR4 2133 ECC/NON-ECC U DIMM	
Storage	Intel PCH	6 x SATA3 6.0 Gb/s by Intel® C236(1 x M.2)
	Additional	N/A
Expansion Slots	1 x PCIe 3.0 x16	
Ethernet	LAN Controller	1 x Intel® i210+1 x Intel® i219
	LAN Port	RJ45:2+1(IPMI)
System management	BMC Controller	ASPEED AST2400
	IPMI dedicated GLAN	Realtek RTL8211E
Type A	1x USB3.0	1x USB2.0



E3C222D4U



Micro ATX



DDR4

Denlow Socket 1150

Application

- Home Server
- Tower Server
- Entry Server



		E3C222D4U
Form Factor		uATX (9.6" x9.6")
Processor Support		Socket 1150 Support Intel® Xeon® E3-1200 v3/v4 Series Processors
Chipset		Intel® C222
Memory		Dual Channel, 4 DIMM DDR3 1600/1333 ECC U DIMM
Storage	Intel PCH	Intel®C222:2 x SATA3 6.0 Gb/s, 4 x SATA2 3.0 Gb/s (support RAID 0, 1, 5, 10)
	Additional	
Expansion Slots		1 x PCIe 3.0 x16, 1 x PCIe 3.0 x8, 1xPCIe 2.0 x8 (PCIe4: X0/X8, PCIe6:x16/x8, PCIe7: x8/x4)
Ethernet	LAN Controller	1 x Intel® i210, 1 xIntel® i217
	LAN Port	RJ45:2 + 1 (for IPMI 2.0)
System management	BMC Controller	ASPEED AST2300
	IPMI dedicated GLAN	Realtek RTL8211E

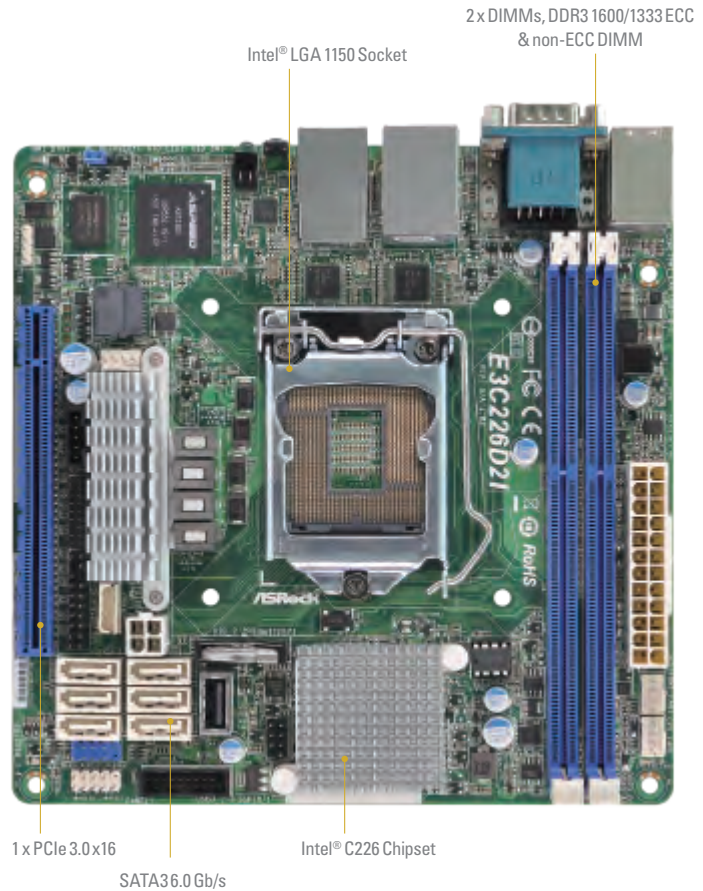


E3C226D2I

E3C224D2I



NAS



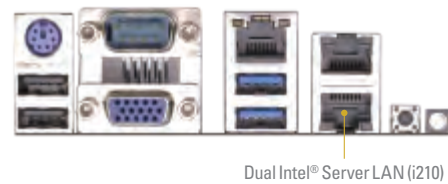
Denlow Socket 1150

Application

- Enterprise NAS
- Home Server
- Web Server Blade Type Node

SKU Option

	E3C226D2I	E3C224D2I
Chipset	C226	C224
SATA3	6	4
SATA2	N/A	2



		E3C226D2I	E3C224D2I
Form Factor		Mini ITX(6.7" x 6.7")	
Processor Support		Socket LGA 1150 Support New 4 th and 4 th Generation Intel® XeonE3-1200 v3/ Core™ i3/i5/i7 Pentium/Celeron Processors	Socket LGA 1150 Support New 4 th and 4 th Generation Intel® XeonE3-1200 v3/Core™ i3/Pentium/Celeron Processors
Chipset		Intel® C226	Intel® C224
Memory		Dual Channel, 2 DIMM DDR3 1600/1333 ECC/non-ECC, U DIMM	
Storage	Intel PCH	Intel® C226: 6 x SATA3 6.0 Gb/s	Intel® C224: 4 x SATA3 6.0 Gb/s, 2 x SATA2 3.0Gb/s (support RAID 0, 1, 5, 10)
	Additional	N/A	
Expansion Slots		1 x PCIe 3.0 x16	
Ethernet	LAN Controller	2 x Intel® i210	
	LAN Port	RJ45:2 + 1 (for IPMI 2.0)	
System management	BMC Controller	ASPEED AST2300	
	IPMI dedicated GLAN	Realtek RTL8211E	
USB 3.0		4 (2 from rear I/O, 2 via USB 3.0 header)	



E3C236D4I-44E85

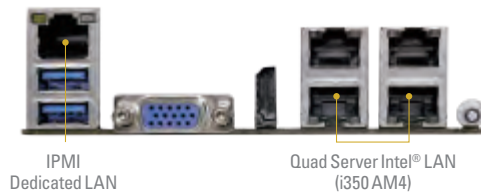
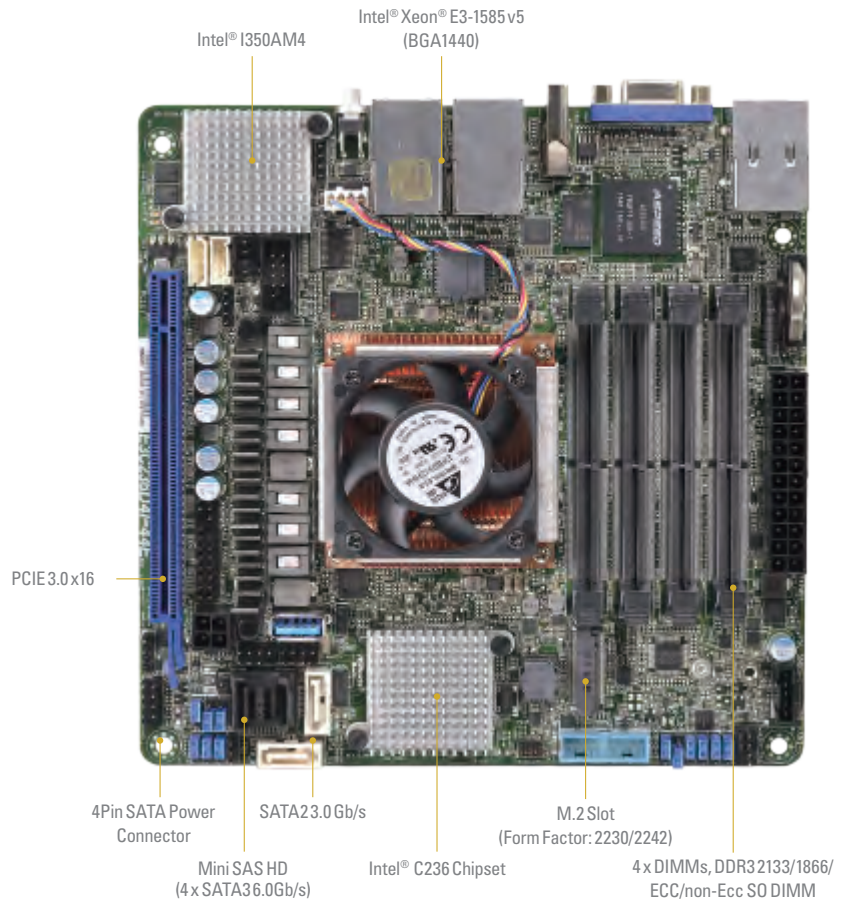


DDR4
SO DIMM

Denlow
Socket 1150

Application

- Video Transcoding
- Streaming Server



		E3C236D4I-44E85
Form Factor		Mini ITX (6.7" x6.7")
Processor Support		Support Intel® Xeon® E3-1585 v5 Series Processors BGA
Chipset		BGA 1440
Memory		Dual Channel, 4 DIMMs, DDR4 2400/2133/1866 ECC SO DIMM
Storage	Intel PCH	Intel® C236 6x SATA3 6Gb/s
	Additional	N/A
Expansion Slots		1 x PCIe 3.0 x16
Ethernet	LAN Controller	4 x RJ45 10GLAN by Intel® I350AM4
	LAN Port	RJ45:4+1(IPMI 2.0)
System management	BMC Controller	ASPEED AST 2400
	IPMI dedicated LAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 3.0		5 (2 from rear I/O, 1 from TYPE A, 2 via header)
SATA DOM		1(share with SATA_0)



C236 WSI4-85

C236 WSI4-85L

C236 WSI4-65L



DDR4



Workstation

Application

- Professional Graphic Server

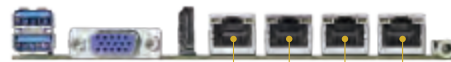


1 x PCIe 3.0 x16

SATA3 6.0Gb/s

Intel® Xeon® E3-1500 v5 Series Processors BGA

4x DIMMs, DDR4 2133/1866 ECC/NON-ECC U SO DIMM



Intel® i210+ Intel® i219LM

	C236 WSI4-85	C236 WSI4-85L	C236 WSI4-65L
CPU	E3-1585 v5:65W	E3-1585L v5:45W	E3-1565L v5:35W

	C236 WSI4-85	C236 WSI4-85L	C236 WSI4-65L
Form Factor	mini ITX(6.7" x 6.7")		
Processor Support	support Intel® Xeon® E3-1500 v5 Series Processors BGA (65W)		
CPU	E3-1585 v5:65W	E3-1585L v5:45W	E3-1565L v5: 35W
Memory	4 DIMM, DDR4 2133/1866 ECC/non-ECC SO DIMM		
Storage	Intel PCH	6x SATA3 by Intel® C236	
	Additional	N/A	
Expansion Slots	1 x PCIe 3.0 x16		
Ethernet	LAN Controller	Intel® i210+Intel® i219LM	
	LAN Port	RJ45:4	
Graphics	Controller	CPU pGFX	
USB 3.0	4(2 from rear I/O, 2 via header)		



D1541D4U-2T8R

D1541D4U-2O8R

D1541D4U-2L+

D1521D4U-2L+



DDR4



SOC



Micro ATX

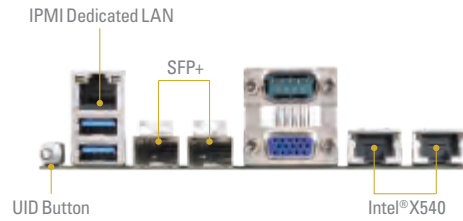


Application

Warm Storage Server
Virtualization, Big Data
and Database Server

SKU Option

	D1521D4U-2L+	D1541D4U-2L+	D1541D4U-2T8R	D1541D4U-2O8R
Chipset	D1521	D1541	D1541	D1541
LSI 3008	V	V	V	V
LAN	1 x Intel® i350 (Support 2x GLAN)	1 x Intel® i350 (Support 2x GLAN)	1 x Intel® X540 (Support 2x GLAN)	1 x Intel® CS4227 (Support 2x 10G ber, SFP+)



	D1521D4U-2L+	D1541D4U-2L+	D1541D4U-2T8R	D1541D4U-2O8R
Form Factor	uATX(9.6"x 9.6")			
Processor Support	support Intel® Xeon® D1521 Processors	support Intel® Xeon® D1541 Processors		
Memory	4 DIMM, DDR4 2400/2133/1866 R/ECC U DIMM			
Storage	Intel PCH Additional	6 x SATA3 6.0 Gb/s by Intel® D1540		
		N/A	LSI 3008: 8 port SAS3(from 2x mini SAS HD connector)	
Expansion Slots	1 x PCIe 3.0 x16, 1 x PCIe 3.0 x8, 2 x M.2			
Ethernet	LAN Controller	1 x Intel® i350 (Support 2x GLAN)	1 x Intel® X540 (Support 2x GLAN)	1 x Intel® CS4227 (Support 2x 10G ber, SFP+)
	LAN Port	RJ45:2+1(IPMI)		
System management	BMC Controller	ASPEED AST2400		
	IPMI dedicated GLAN	Realtek RTL8211E		
USB 3.0	4(2 from rear I/O,1 via header,1 from Type A)			



D1541D4I-2L2T

D1541D4I

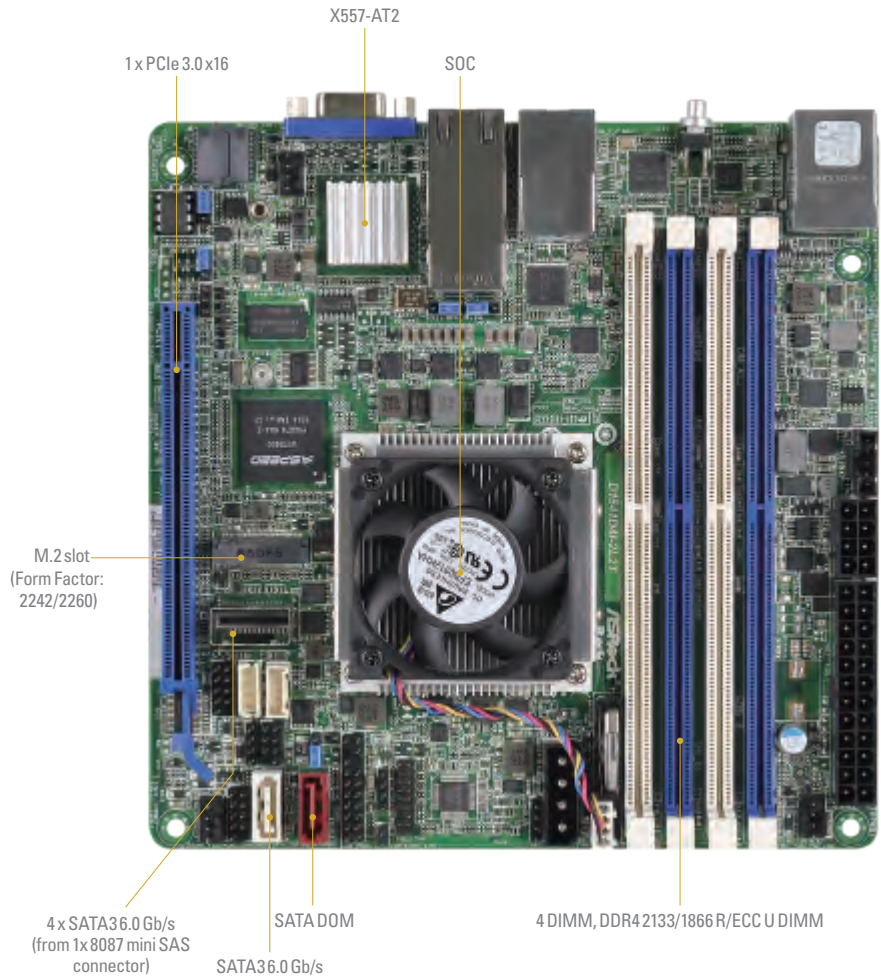
D1521D4I



DDR4



SOC

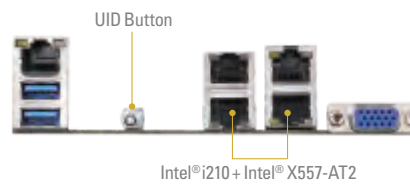


Application

Dynamic Web Serving,
Network Appliance or Firewall
Mini Rendering Machine

SKU Option

	D1541D4I-2L2T	D1541D4I	D1521D4I
Intel PCH	D1541	D1541	D1521
10GLAN	V	N/A	N/A



Broadwell-DE
SOC

		D1541D4I-2L2T	D1541D4I	D1521D4I
Form Factor		Mini ITX(6.7" x 6.7")		
Processor Support		Support Intel® Xeon® D1541 Processor		Support Intel® Xeon® D1521 Series Processors
Memory		DDR4 2400/2133/1866 R/ECC U DIMM memory		
Storage	Intel PCH	6 x SATA3 6.0 Gb/s by Intel® D1541 Series		
	Additional	N/A		
Expansion Slots		1 x PCIe 3.0 x16		
Ethernet	LAN Controller	2x Intel® X557-AT2(Support 2x 10G Base-T)+ 2x Intel® i210(Support 2x GLAN)	2 x Intel® i210(Support 2x GLAN)	
	LAN Port	RJ45:4+1(IPMI)	RJ45:2+1(IPMI)	
System management	BMC Controller	ASPEED AST2400		
	IPMI dedicated GLAN	Realtek RTL8211E		
USB 3.0		3(2 from rear I/O, 1 from Type A)	2(2 from rear I/O)	
M.2		1 slot (PCIe, support form factor 2242/2280)		

C37584U-2TP



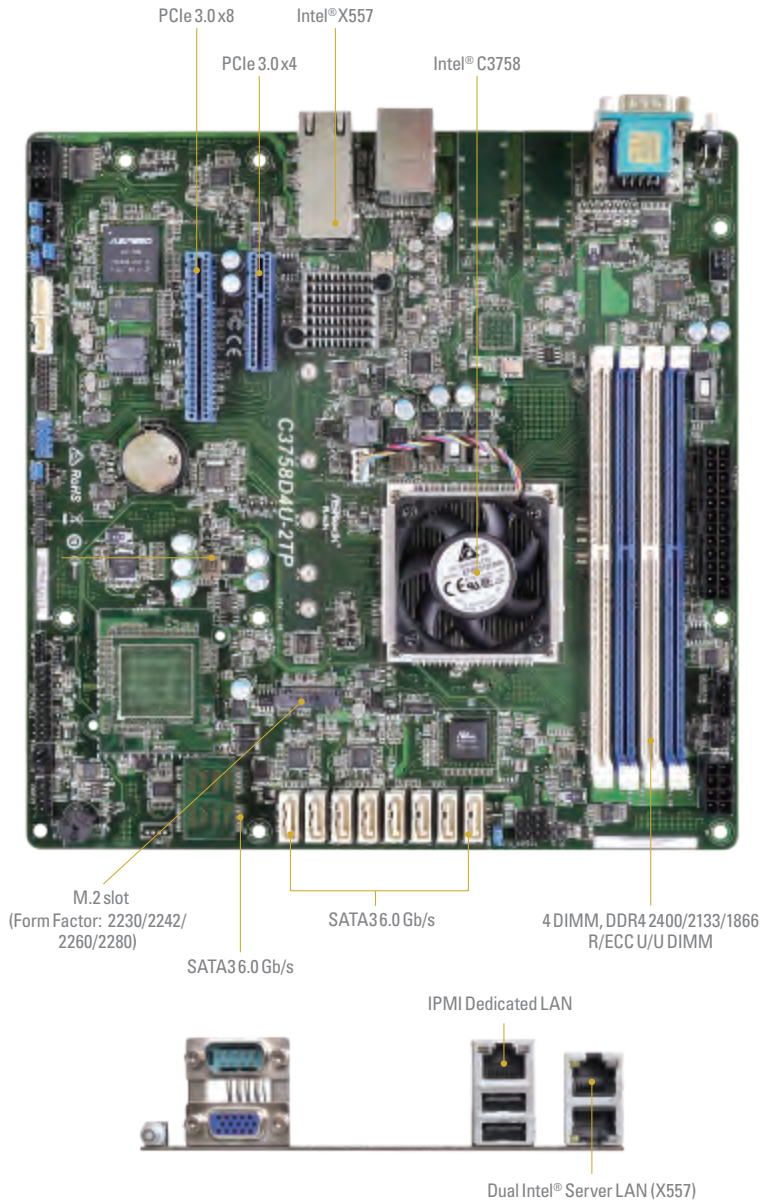
DDR4



Micro ATX



SOC



Application

- Cold Storage Control Node
- Advanced NAS
- Static Web Content Server Application

ATOM
SOC

		C37584U-2TP
Form Factor		mATX (9.6" x9.6")
Processor Support		Support Intel® Atom® Processor C3758: 8core, 25W
Chipset		SoC
Memory		Dual Channel, 4 DIMMs, DDR4 2400/2133/1866 RDIMM, ECC DIMM and U DIMM
Storage	Intel PCH	Intel® C3758 : 4 x SATA3 6.0 Gb/s (PORT SATA_3 switch with M.2)
	Additional	Marvell 9172 x2 for 4 port SATA3 6.0 Gb/s
Expansion Slots		1 x PCIe 3.0 x8, 1 x PCIe 3.0 x4
Ethernet	LAN Controller	2 x RJ45 10GLAN by Intel® X557
	LAN Port	RJ45:2+1(IPMI 2.0)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ickm, vMedia, redfish, HTML 5.0 supported
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN
USB 2.0		4 (2 from rear I/O, 2 via header)
SATA DOM		1(share with SATA_0)

C3758D4I-4L

C3558D4I-4L



DDR4



Micro ATX



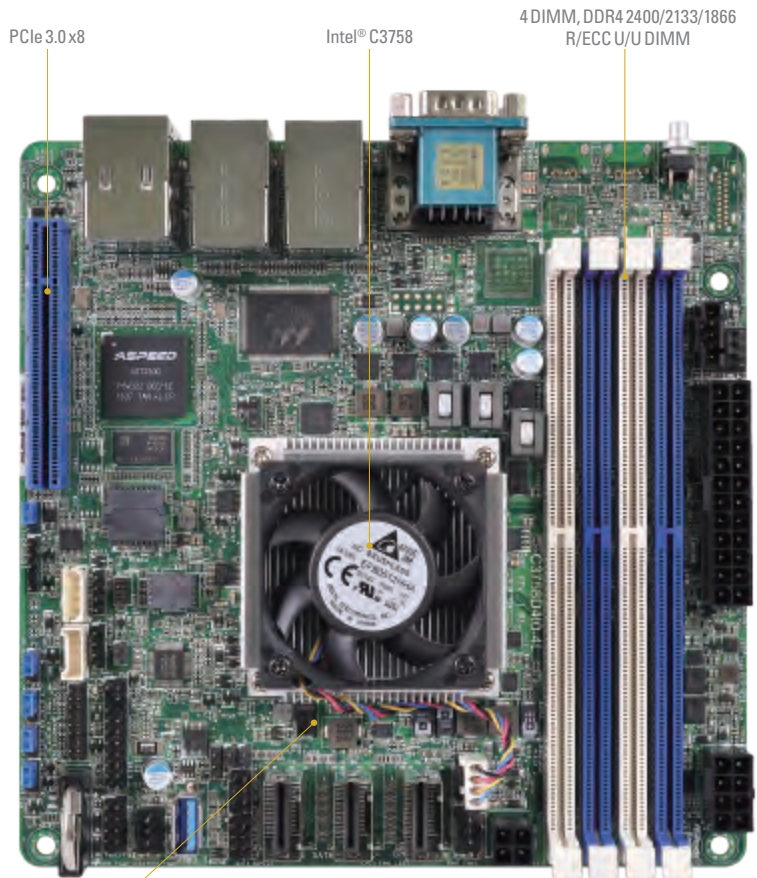
SOC

Application

- SOHO/Enterprise NAS
 - Home Server
 - Static Web Content Server
- Application

SKU Option

	C3758D4I-4L	C3558D4I-4L
CPU	C3758: 8core, 25W	C3558: 4core, 16W
Storage Capacity	Intel® C3758 : 13 x SATA3 6.0 Gb/s	Intel® C3558 : 5 x SATA3 6.0 Gb/s



M.2 slot
(Form Factor: 2230/2242/
2260/2280)



Quad Server GLAN IPMI Dedicated LAN
by Marvell 88E1543

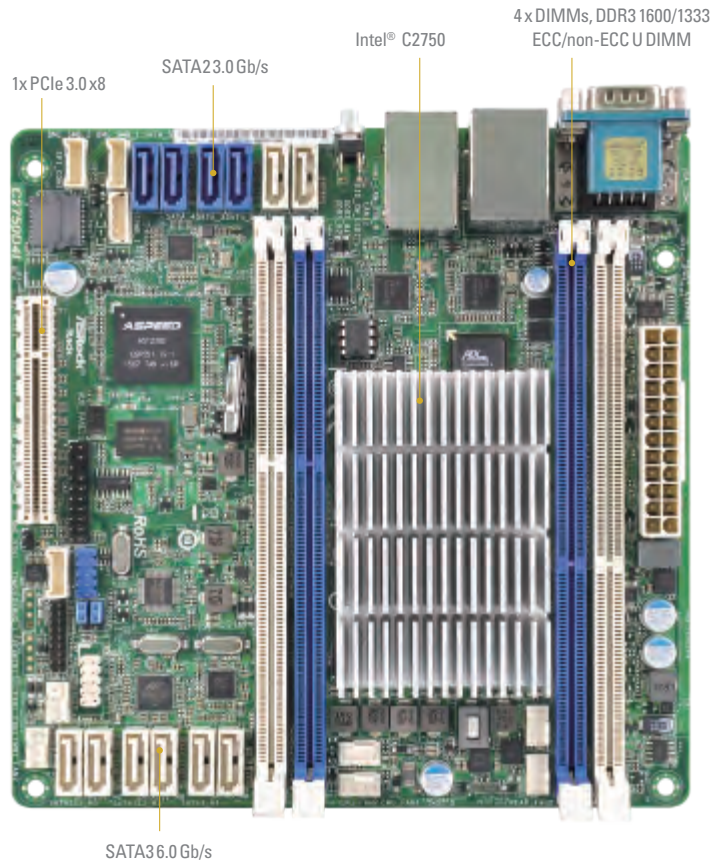
		C3758D4I-4L	C3558D4I-4L
Form Factor		Mini ITX (6.7" x6.7")	
Processor Support		Support Intel® Atom® Processor C3758: 8core, 25W	Support Intel® Atom® Processor C3558: 4core, 16W
Chipset		SoC	
Memory		Dual Channel, 4 DIMMs, DDR4 2400/2133/1866 RDIMM, ECC DIMM and U DIMM	
Storage	Intel PCH	Intel® C3758 : 13 x SATA3 6.0 Gb/s (SATA 0~3: SATA 7-pin connectot, SATA4~11 : 8x SATA port from 2x mini SAS HD connector, SATA 12 with SATA 7-pin connector and SATA DOM support)	Intel® C3558 : 5 x SATA3 6.0 Gb/s (SATA 8~11 : SATA port from mini SAS HD connector, SATA 12 with SATA 7-pin connector and SATA DOM support)
Additional		N/A	
Expansion Slots		Support Intel® Atom® Processor C3758: 8core, 25W	Support Intel® Atom® Processor C3558: 8core, 25W
Ethernet	LAN Controller	Marvell 88E1543(4L)	
	LAN Port	RJ45:4+1(IPMI 2.0)	
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with IkvM, vMedia, redfish, HTML 5.0 supported	
	IPMI dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN PIN	
USB 3.0		2 (from rear I/O)	
SATA DOM		N/A	2 (SATA_0, SATA_12)



C2750D4I

C2750D4I+

C2550D4I



ICHT10R
SOC

Application

- Big Data High Hadoop Data Node
- Home/Office Server
- Cold storage Server
- Openstack NAS

SKU Option

	C2750D4I	C2750D4I+	C2550D4I
Intel PCH	C2750	C2750	C2550
Heatsink with Fan	N/A	V	N/A



Dual Intel® Server LAN (i210)

	C2750D4I	C2750D4I+	C2550D4I
Form Factor	Mini ITX(6.7" x 6.7")		
Processor Support	Intel® Octa-Core C2750 Processor		Intel® Octa-Core C2550 Processor
Memory	Dual Channel, 4 DIMM DDR3 1600/1333 ECC/non-ECC U DIMM		
Storage	Intel PCH	Intel® C2750: 2 x SATA3 6.0 Gb/s, 4x SATA2 3.0Gb/s	Intel® C2550: 2 x SATA3 6.0 Gb/s, 4x SATA2 3.0Gb/s
	Additional	Marvell 9172 : 2 x SATA3 6.0 Gb/s, Marvell 9230 : 4 x SATA3 6.0 Gb/s	
Expansion Slots	1x PCIe2.0x 8		
Ethernet	LAN Controller	2 x Intel® i210	
	LAN Port	RJ45:2 + 1 (for IPMI 2.0)	
System management	BMC Controller	ASPEED AST2300	
	IPMI dedicated GLAN	Realtek RTL8211E	
USB 3.0	4 (2 from rear I/O, 2 via USB 3.0 header)		



C236M WS



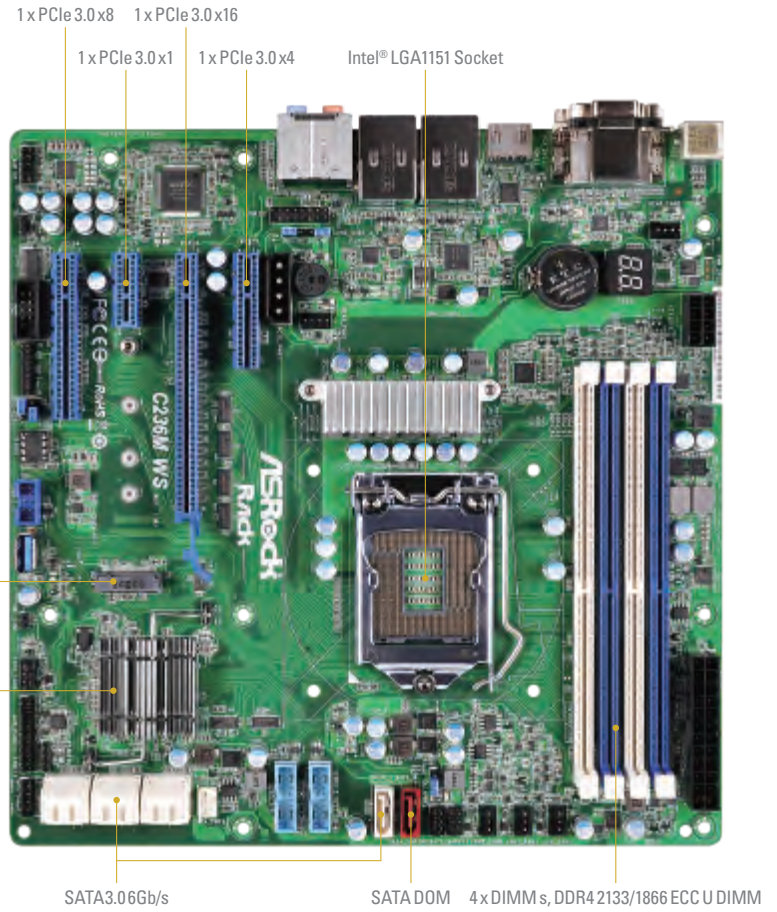
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DDR4



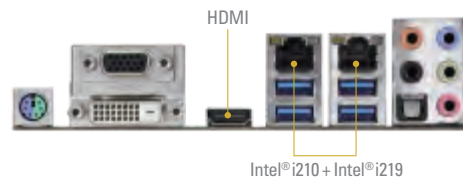
Storage



Greenlow Socket 1151

Application

- H.265 NVR Server
- Storage Server
- Tower Web Server



		C236M WS
Form Factor		uATX(9.6" x 9.6")
Processor Support		Support Intel® Xeon® E3-1200 v5 Series Processors
Memory		4 DIMM, DDR4 2133/1866 ECC, U DIMM
Storage	Intel PCH	8 x SATA3 6.0 Gb/s by Intel® C236
	Additional	N/A
Expansion Slots		1 x PCIe 3.0 x16, 1 x PCIe 3.0 x8, 1 x PCIe 3.0 x4, 1 x PCIe 3.0 x1, 1 x M.2 (PCIe4, PCIe6: x8/x8 or x16/x0, PCIe7:x4/x0, share with M.2)
Ethernet	LAN Controller	1 x Intel® i210+1 x Intel® i219
	LAN Port	RJ45:2
USB 3.0		6(4 from rear I/O, 2 via header)
USB 2.0		2(2 via header)



C236 WS



1151

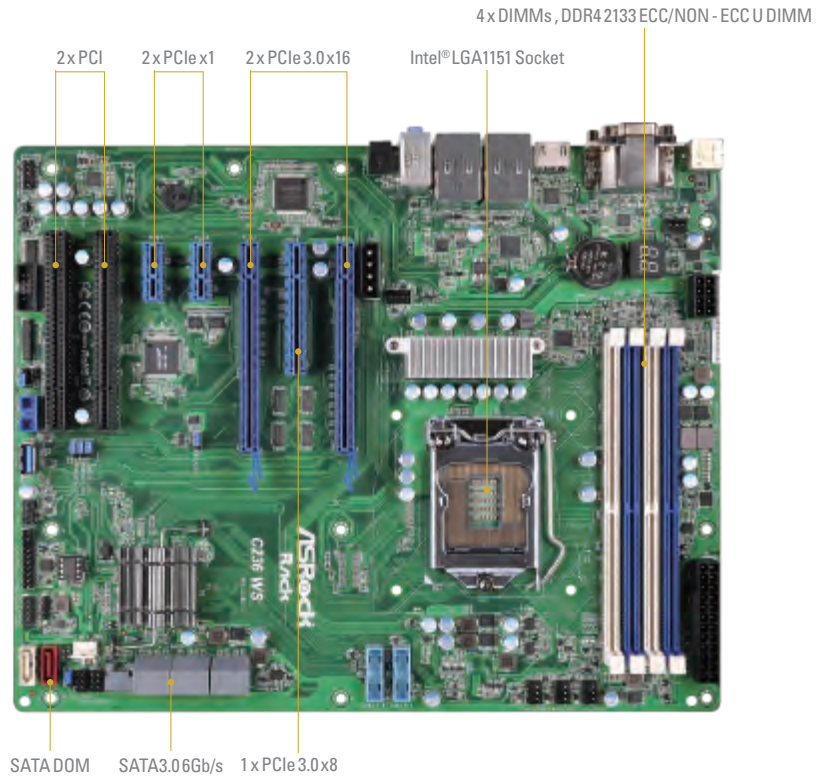


DDR4



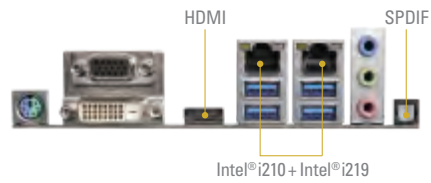
Workstation

Greenlow Socket 1151



Application

- H.265 NVR Server
- Graphic Workstation
- 8 Bays Storage Server



		C236 WS
Form Factor		ATX(12" x 9.6")
Processor Support		Support Intel® Xeon® E3-1200 v5 Series Processors
Memory		4 DIMM, DDR4 2133 ECC/non-ECC U DIMM
Storage	Intel PCH	8 x SATA3 6.0 Gb/s by Intel® C236
	Additional	N/A
Expansion Slots		2 x PCIe 3.0 x16, 1 x PCIe 3.0 x8, 2 x PCIe, 2 x PCI (PCIe5, PCIe7: x8/x8, x16/x0)
Ethernet	LAN Controller	1 x Intel® i210+1 x Intel® i219
	LAN Port	RJ45:2
USB 3.0		9(4 from rear I/O,4 via header,1 from Type A)
USB 2.0		2(2 via header)



C236 WSI



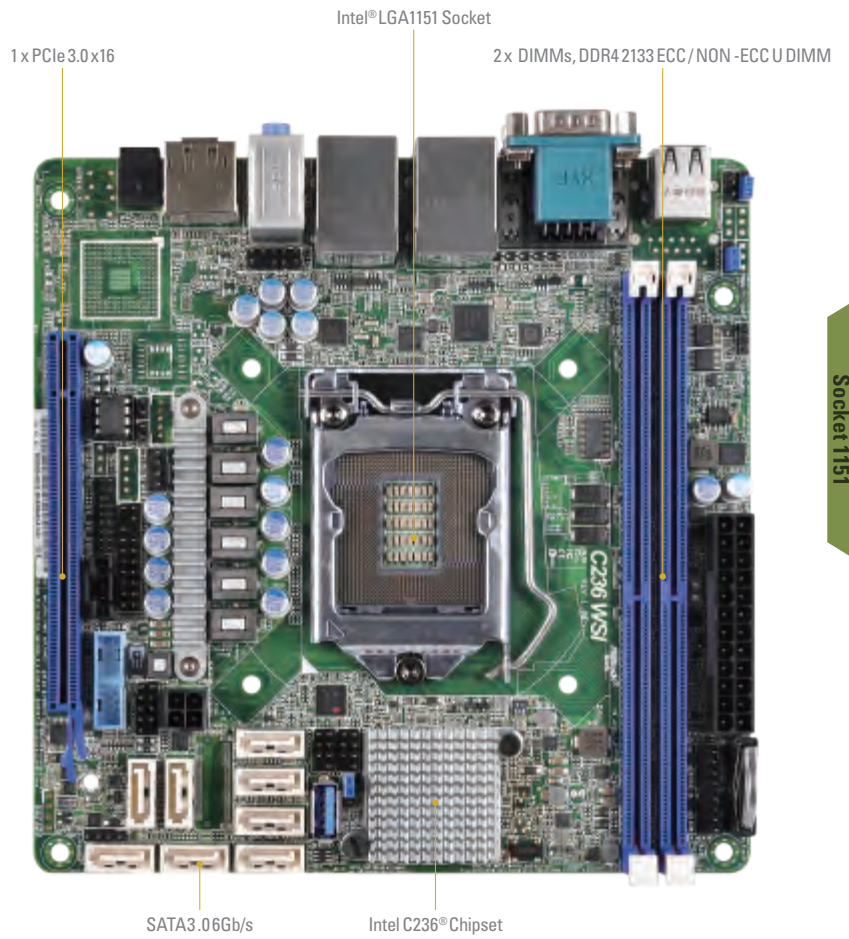
1151



DDR4



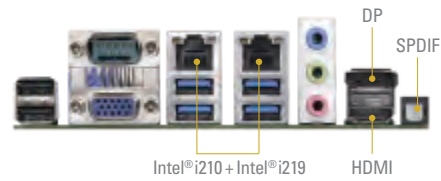
Workstation



Greenlow Socket 1151

Application

- Mini Workstation
- Modular Rendering Machine
- H.265 Compact NVR Server



		C236 WSI
Form Factor		Mini ITX(6.7"x 6.7")
Processor Support		Support Intel® Xeon® E3-1200 v5 Series Processors
Memory		2 DIMM, DDR4 2133 ECC/non-ECC U DIMM
Storage	Intel PCH	8 x SATA3 6.0 Gb/s by Intel® C236
	Additional	N/A
Expansion Slots		1 x PCIe 3.0 x16
Ethernet	LAN Controller	1 x Intel® i210+1 x Intel® i219
	LAN Port	RJ45:2
USB 3.0		7(4 from rear I/O,1 from Type A, 2 via header)
USB 2.0		2(2 via header)



C226M WS

H97M WS

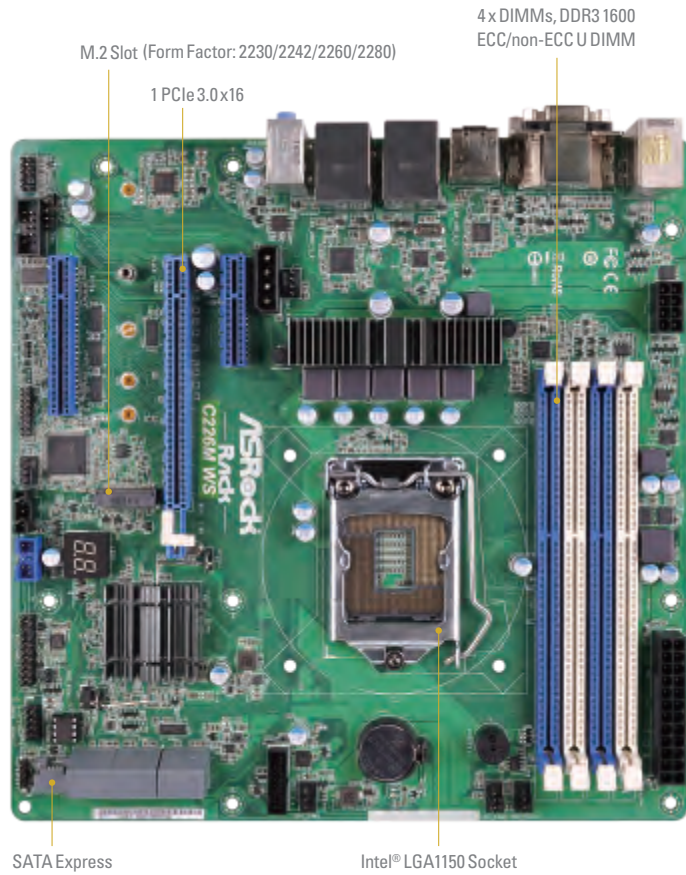


Micro ATX



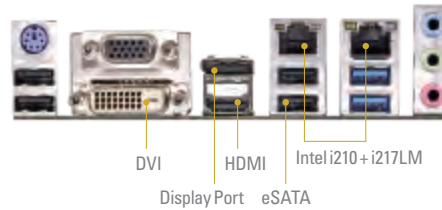
Workstation

Dellw
Socket 1150



Application

- Tower Webserver
- Video Broadcasting
- Security Server



		C226M WS	H97M WS
Form Factor		uATX(9.6" x 9.6 ")	
Processor Support		Socket LGA 1150 Supports for 5th Generation, and 4th Generation Intel® Xeon® E3-1200 v3/v4/Core™ i7/i5/i3/Pentium®/Celeron® Processors	
Chipset		Intel® C226	Intel® H97
Memory		Dual Channel, 4 DIMM DDR3 1600/1333 ECC/non-ECC U DIMM	Dual Channel, 4 DIMM DDR3 1600/1333 non-ECC U DIMM
Storage	Intel PCH	Intel® C226: 6 x SATA3 6.0 Gb/s	Intel® H97: 6 x SATA3 6.0 Gb/s
	Additional	N/A	
Expansion Slots		1x PCIe 3.0 x16, 1 PCIe 3.0 x8, 1PCIe 2.0x4, 1 x M.2	1x PCIe 3.0 x16, 1PCIe 2.0x4, 1 x M.2
Ethernet	LAN Controller	1 xIntel® i210, 1 xIntel® i217LM	
	LAN Port	RJ45:2	
Audio		Realtek ALC892 (3 Jack)	
USB 3.0		4 (2 from rear I/O, 2 via USB3.0 header)	



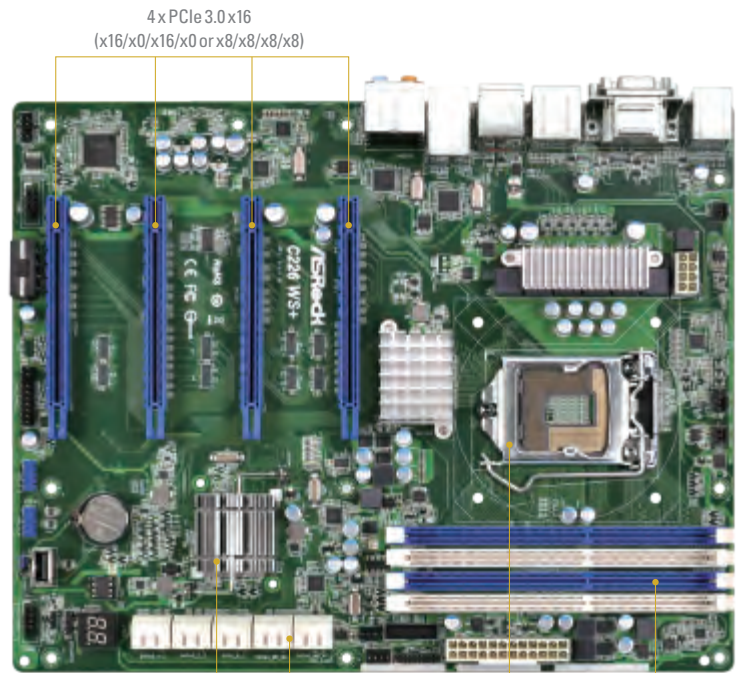
C226 WS+



GPGPU



Workstation



Denlow Socket 1150

Application

- Graphics Workstation
- Multi Display server
- Four Boards GPGPU
- High-end Firewall Application Rackmount
- Multiple Display TV Wall
- Medical Image Server



DVI HDMI eSATA Dual intel i210

		C226 WS+
Form Factor		ATX(12" x 9.6")
Processor Support		Socket LGA 1150 Support for 5 th Generation, and 4 th Generation Intel® Xeon® E3-1200 v3/Core™ i7/i5/i3/ Pentium®/Celeron® Processors
Chipset		Intel® C226
Memory		Dual Channel, 4 DIMM DDR3 1600/1333 ECC/non-ECC U DIMM
Storage	Intel PCH	Intel®C226: 6x SATA3 6.0 Gb/s
	Additional	2 x Marvell 9172 : 4 x SATA3 6.0 Gb/s(1 share with eSATA)
Expansion Slots		4 x PCIe 3.0 x16 (x16/x0/x16/x0 or x8/x8/x8/x8)
Ethernet	LAN Controller	2 x Intel® i210
	LAN Port	RJ45:2
USB 3.0		6 (4 from rear I/O , 2 via USB3.0 header)



C226 WS

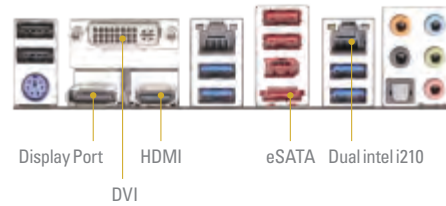
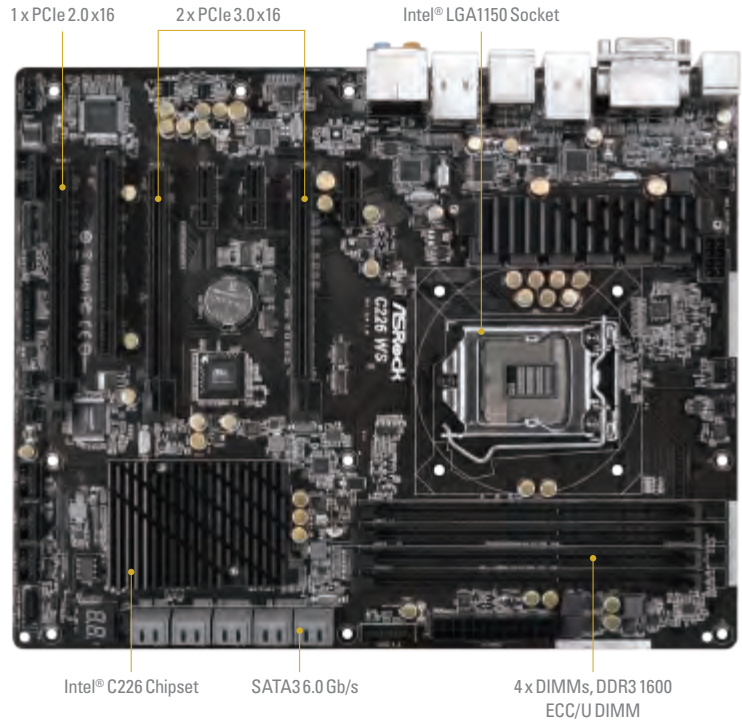


Workstation

Dellw
Socket 1150

Application

- Graphics Workstation
- Tower Web Server
- Webhosting
- Security Server
- Entry Server



		C226 WS
Form Factor		ATX(12" x 9.6")
Processor Support		Socket LGA 1150 Support 5 th Generation, and 4 th Generation Intel®Xeon® E3-1200 v3/v4/Core™ i7/i5/i3/ Pentium®/Celeron® Processors
Chipset		Intel® C226
Memory		Dual Channel, 4 DIMM DDR3 1600/1333 ECC/non-ECC U DIMM
Storage	Intel PCH	Intel® C226: 6x SATA3 6.0 Gb/s
	Additional	2 x Marvell 9172 : 4 x SATA3 6.0 Gb/s(1 share with eSATA)
Expansion Slots		2 x PCIe 3.0x16, 1 x PCIe 2.0 x4, 3 x PCIe 2.0 x1, 1 x PCI (PCIe6/PCIe3 : x16/x0 or x8/x8 mode, PCIe1: x4 mode)
Ethernet	LAN Controller	2 x Intel® i210
	LAN Port	RJ45:2
USB 3.0		6 (4 from rear I/O, 2 via USB3.0 header)

Mezzanine

MP-1543R4 / MP-557R2 / MP-4227R2 / MP-4223R4



2 x GLAN (RJ45)



MP-1543R4

2 x 10G Base-T(RJ45)



MP-557R2

2 x 10G fiber (SFP+)



MP-4227R2

4 x 10G fiber (SFP+)

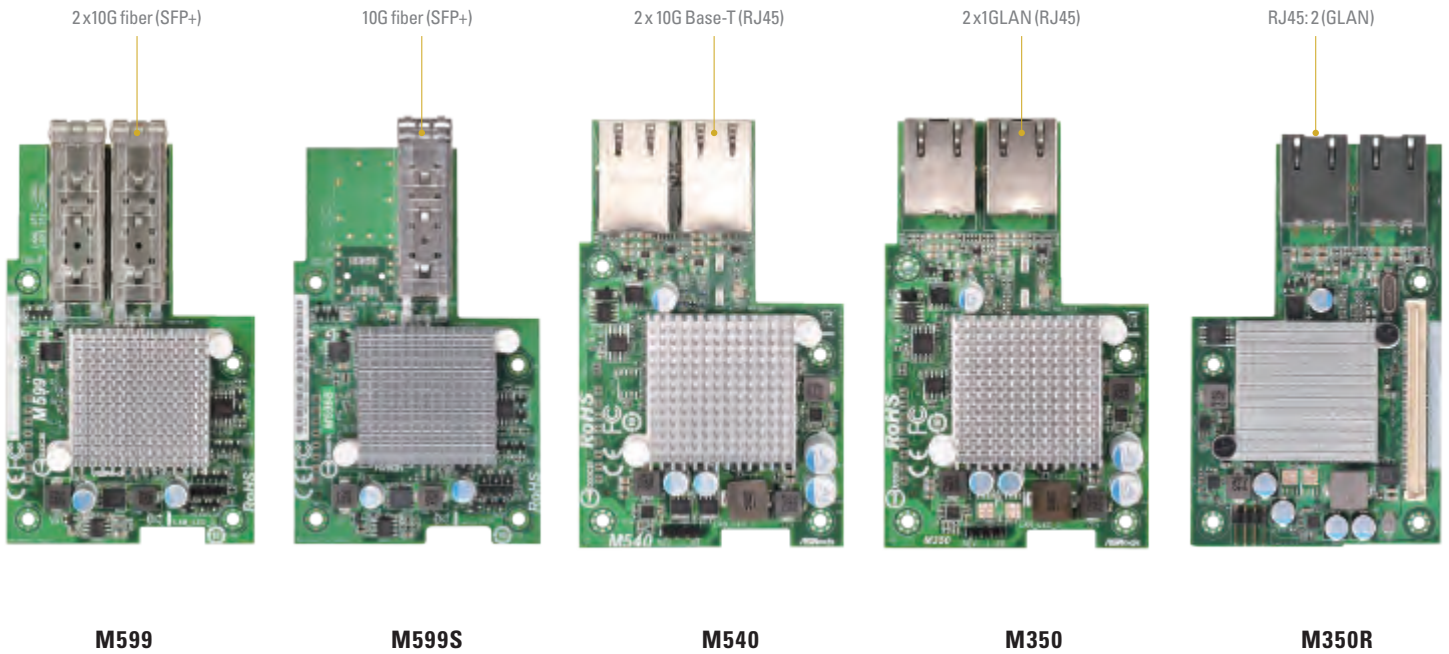


MP-4223R4

Mezzanine	MP-1543R4	MP-557R2	MP-4227R2	MP-4223R4	
Interface	110 x 71.01 mm(OCP PHY Mezzanine Connector C)				
Form Factor	1Gb/100M/s	10Gb/1Gb/100M/s	10Gb/1Gb/100M/s	10Gb/1Gb/100M/s	
Chipset	Marvell 88E1543	Intel® X557	C.S WPCS4227C.A1-900313 BGA121	Inphi CS4223	
Ethernet	LAN Port	RJ45:2(GLAN)	RJ45:2(10G Base-T)	2 x 10G SFP+ (Fiber)	4 x 10G SFP+ (Fiber)

Mezzanine

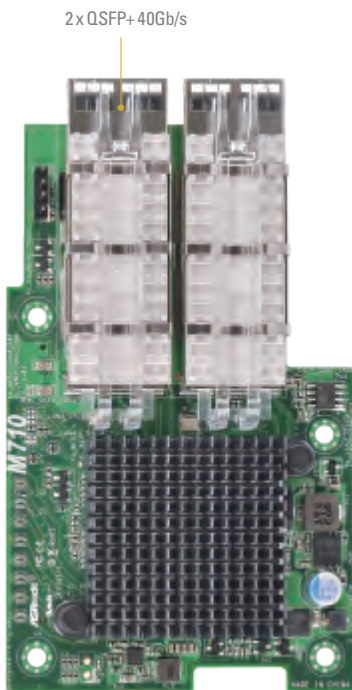
M599 / M599S / M540 / M350 / M350R



Mezzanine	M599	M599S	M540	M350	M350R
Interface	Mezzanine card 10.9x6.7 cm				
Form Factor	10G/s	10G/s	10G/1G/100M/s	1Gb/s	1Gb/s
Chipset	Intel® 82599ES	Intel® 82599EN	Intel® X540	Intel® i350	Intel® i350
Ethernet	LAN Port	2 (10G Fiber (SFP+))	1 x SFP+ (Fiber)	RJ45:2(10G Base-T)	RJ45: 2(GLAN)

Mezzanine

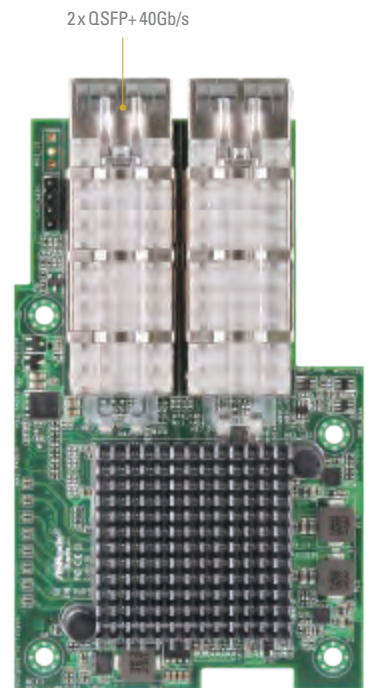
M710 / M710S / MCX3



M710



M710S



MCX3

Mezzanine	M710	M710S	MCX3
Form Factor	Mezzanine card 68.0mmx109.4mm(PCB board side) 68.0mmx116.8mm(With QSFP connector)		
Interface	10/40Gb/s		
LAN Controller	Intel® Ethernet Controller XL710-AM2	Intel® Ethernet Controller XL710-AM1	Mellanox ConnectX-3 Pro EN
Ethernet LAN Port	2 x QSFP+ 40Gb/s	1 x QSFP+ 40Gb/s	2 x QSFP+ 40Gb/s

Mezzanine

M3008

M3108

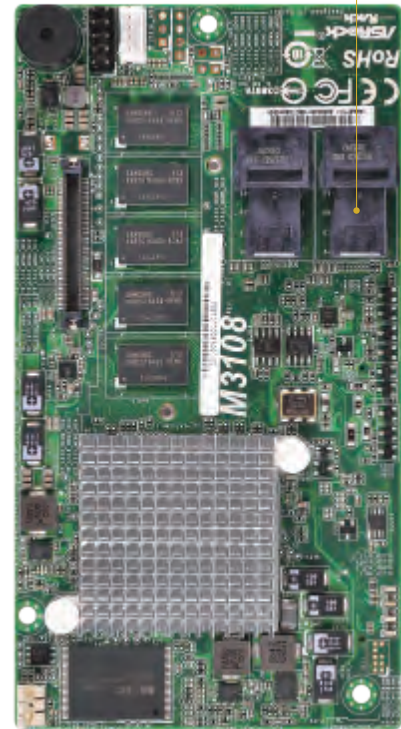
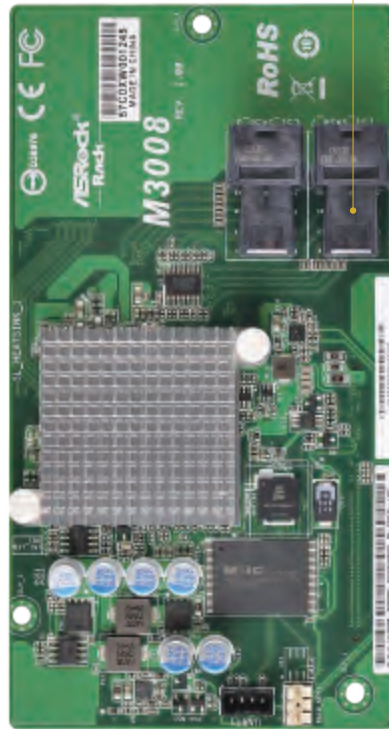
Riser Card

1U12LIW_RB1

RB1UX16

2 x HD Mini-SAS SFF8643

2 x HD Mini-SAS SFF8643



M3008

M3108

Mezzanine	M3008	M3108
Form Factor	140 mm x 75 mm	
TYPE	SATA/SAS	
Storage Controller	LSISAS3008 PowerPC 476 controller @ 1.2 GHz	LSISAS3108 PowerPC 476 controller @ 1.2 GHz
Interface	8x PCI Express 3.0	
Data Transfer Rates	Up to 12Gb/s per port	
Internal Connectors	2 HD Mini-SAS SFF8643 (Horizontal mount)	
Operating Voltage (V+)	+12V	



1U12LIW_RB1 (X8 Riser card)



RB1UX16 (X16 Riser card)



RB1X16L

Riser Card	1U12LIW_RB1	RB1UX16	RB1X16L
PCIE Spec	X8	X16	X16
Dimension	125 x 32mm		

ASRock[®] — Rack —

Temporal Data Management on Data Warehousing Environments



1U12XL series

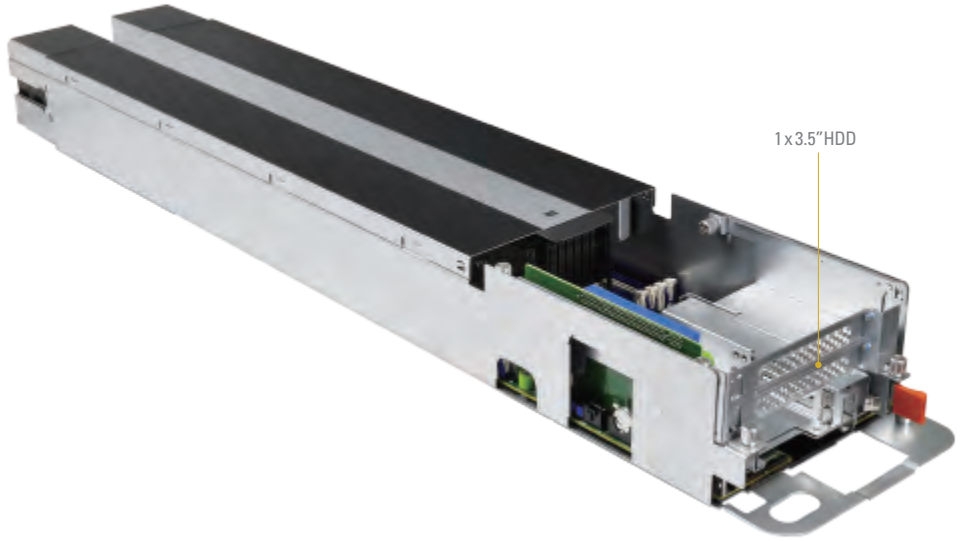
Optimized Performance and Storage in High-density.
Best Practice for Web 2.0 Cloud Datacenter Storage

www.asrockrack.com





OCP3-1L



2011-R3

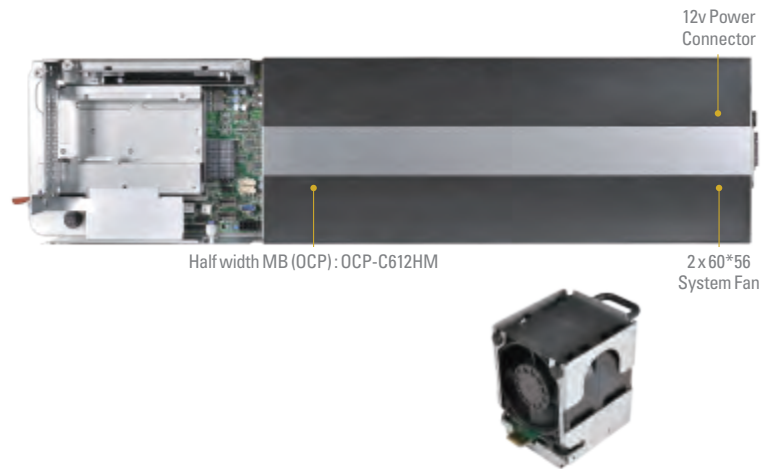


Open Compatible



DDR4

*Optimized Power Efficiency Minimized TCO
for Compute-intensive Applications*



OCP3-1L



System Physical Status	Form Factor	2U OCP Rack
	Chassis Dimension	955mm X 174mm X 88.1mm
	Support MB Size	Half (OCP), 6.5" x 20" (OCP-C612HM)
Front Panel	Buttons	Power button, reset button
	LEDs	N/A
	I/O Ports	1 x USB 3.0 port
		2 x LAN Port
	1 x VGA Header	
	1 x IPMI Header	
1 x Debug Port		
Storage	External	1*3.5" SATA HDD
System Cooling	internal	Mother Board 2 Bay SATA Ports
	Fan(Front)	2 x 60*56 system fans
Compatible Motherboard		OCP-C612HM

• Compatible Mezzanine Lan Card: M350R, M540R, M599R



1U12XL-C622 RPSU



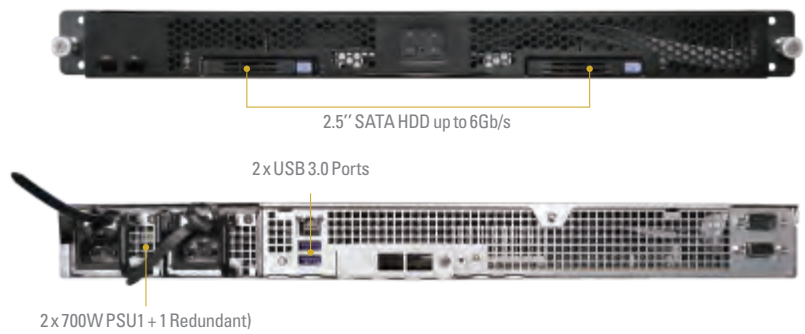
3647



2666



High-density Web 2.0
Cloud Datacenter Storage



1U12XL-C622 RPSU



System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	860 x 438.5 x 43.2 mm
	Support MB Size	CEB, 12"x10.5" (EP2C6212D16FM)
Front Panel	Buttons	Power On/Standby button, UID button, System rest button
	LEDs	Power LED, LAN activity LED, HDD status LED
	I/O Ports	N/A
Storage	External	12*3.5" SATA HDD
	Front Side Backplane	3 x backplane with 1 mini SAS 8087 connector to 4 SATA3
	Internal Side	2 Bay 2.5" SATA HDD (6Gb/s)
	Internal Side Backplane	N/A
System Cooling	Fan	6 x 40*28 system fans
	Power Supply	2 (1+1), 1U Redundant
Power Supply	Capacity	2 (1+1), 1U Redundant
	Output Watts	700W
	Efficiency	Platinum



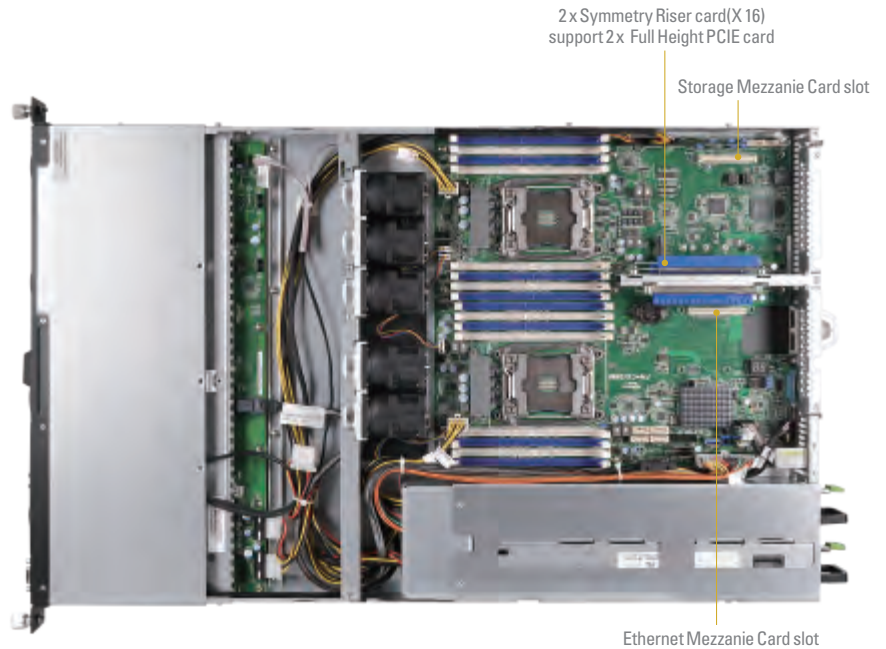
1U2FH-4L



2 Full-High Card Supported in 1U



2011-R3



High-density and High Performance Cloud Computing Nodes for HPC, Telecom and Internet Security



1U2FH-4L



System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	710 mm x 430 mm x 43.5 mm (28x 16.9 x 1.5")
	Support MB Size	EEB, 12" x13" (FH-C612NM)
Front Panel	Buttons	Power On/Standby button, System reset button
	LEDs	Power LED, Hard drive activity LED, Network activity LEDs
	I/O Ports	2 x USB 3.0 Ports
Storage	External	4 x 3.5" SATA HDDs (6GB/s) Hot Swap Bay
	Internal	2 x 2.5" SATA HDDs (6GB/s)
System Cooling	Fan	6 x 40*56 system fans
Power Supply	Capacity	1U(1+1) Redundant
	Output Watts	650W
	Efficiency	Platinum
HDD Backplane	Expander	N/A
	Connection to MB	2x mini-SAS 8087 & 4-port SATA3

- Compatible Mezzanine Lan Card: M350R, M540R, M599R
- Compatible Mezzanine Storage Card: M3008, M3008S, M3108



1U12LW-C2750



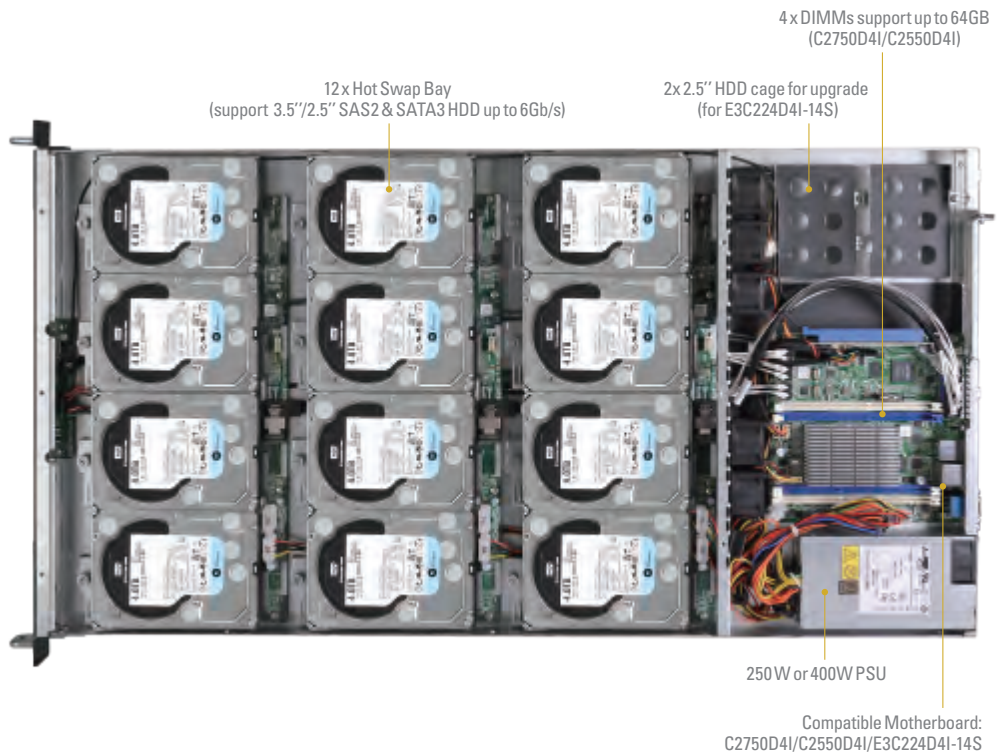
Storage



1U/2U High Density Storage



DDR3



Best Practice for Web Cold Storage



C2750D41/C2550D41

1U12LW-C2750



System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	31.9" x 16.9" x 1.7" (810 x 430 x 43.5 mm)
	Support MB Size	Mini-ITX, 6.7" x 6.7"
Front Panel	Buttons	Power On/Standby button, UID button, System reset button, NMI button
	LEDs	Power LED, Identification LED, Hard drive activity LED, 2x Network activity LEDs
	I/O Ports	2 x USB 2.0 Ports
Storage	Drive Bay	12 x 3.5" SATA HDDs (6GB/s), 2 x 2.5" SATA HDDs (6GB/s)
System Cooling	Fan	5 x 40*28 mm system fans
Power Supply	Capacity	1U, Single
	Output Watts	250W
	Efficiency	Bronze
HDD Backplane	Expander	NA
	Connection to MB	3 x mini-SAS 8087



2U4FH-8L



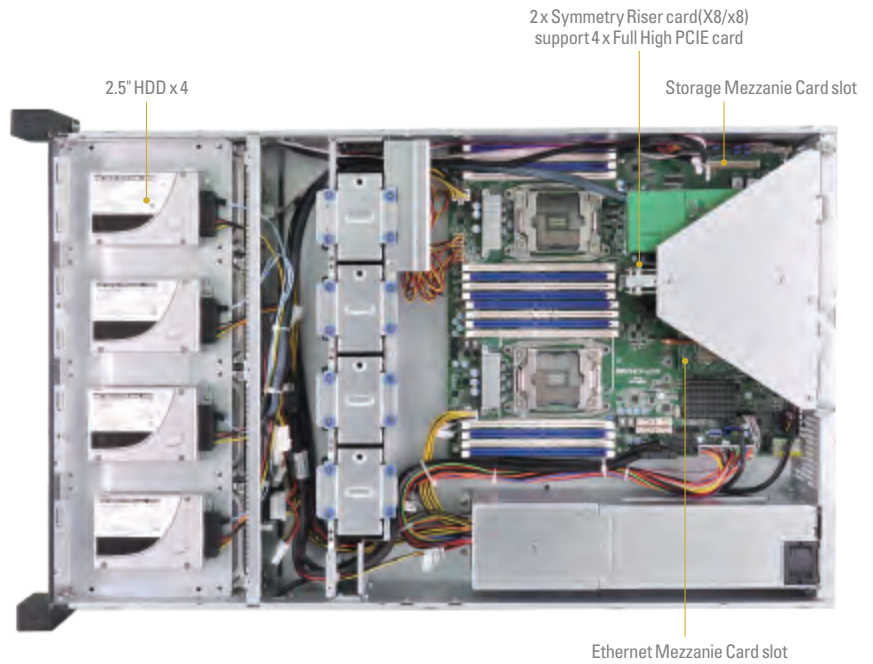
2 Full-Height Card Supported in 2U



2011-R3



10Gbase-T



High Performance Computing Server for Datacenter, Big Data, VM and Enterprise System



VGA Port



Redundant PSU

2U4FH-8L



System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	715mm x 448mm x 86mm (28.1 x 17.6 x 3.4")
	Support MB Size	EEB, 12" x 13" (FH-C612NM)
Front Panel	Buttons	Power On/Standby button, System reset button
	LEDs	Power LED, Hard drive activity LED, Network activity LEDs
	I/O Ports	2 x USB 2.0 Ports
Storage	External	8 x 3.5" SATA HDDs (6GB/s) Hot Swap Bay
	Internal	4 x 2.5" PCIe SSD
System Cooling	Fan	4 x 80*38 system fans
Power Supply	Capacity	1U(1+1) Redundant
	Output Watts	750W
	Efficiency	Platinum
HDD Backplane	Expander	N/A
	Connection to MB	N/A

- Compatible Mezzanine Lan Card: M350R, M540R, M599R
- Compatible Mezzanine Storage Card: M3008, M3008S, M3108



2U2G



Intel PHI



NVIDIA TESLA



AMD FIREPRO

2 x Symmetry Riser card(X8/x8)
support 4 x Full High PCIE card

Storage Mezzanine Card slot



Converged Server, HPC, Virtualization and Big Data



VGA Port



Redundant PSU

2U2G



System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	715mm x 448mm x 86mm(28.1 x 17.6 x 3.4")
	Support MB Size	EEB, 12" x 13"(FH-C612NM)
Front Panel	Buttons	Power On/Standby button, UID button
	LEDs	System LED, UID LED, Power LED, 2 x Network activity LED
	I/O Ports	2 x USB 2.0 ports
Storage	External	8 x 3.5" SATA HDDs(6GB/s), 4x 2.5" SATA HDDs(6GB/s)
	internal	4x 2.5" SATA HDDs(6GB/s)
System Cooling	Fan (Front)	4 x 80*38 system fans
Power Supply	Capacity	2U(1+1)Redundant
	Output Watts	1200W
	Efficiency	Platinum
GPGPU Card	GPGPU Watts	Max 300w /per card
	Support GPGPU	2 x GPGPU card

- Compatible Mezzanine Lan Card: M350R, M540R, M599R
- Compatible Mezzanine Storage Card: M3008, M3008S, M3108



2U4N-R/24S



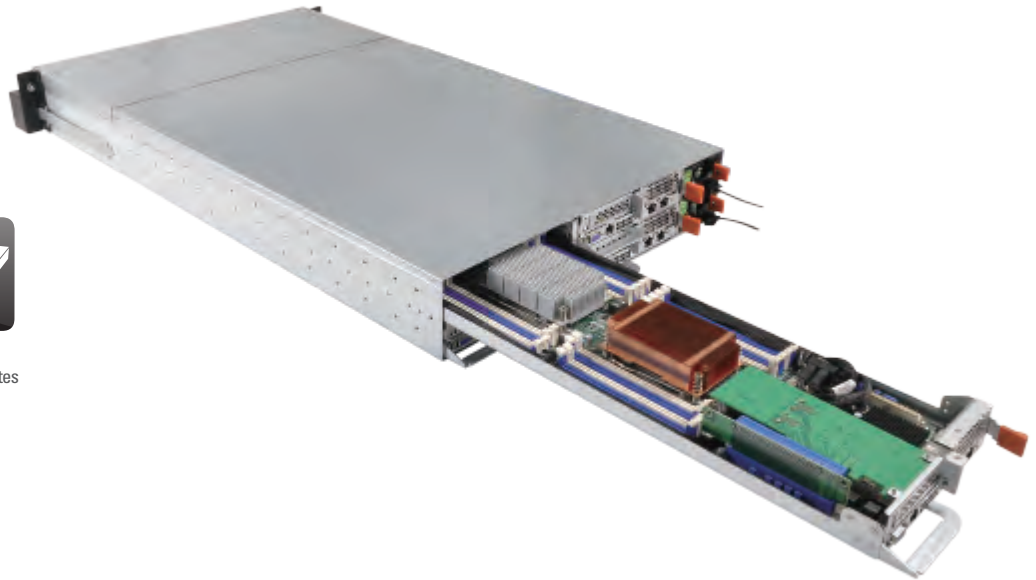
2011-R3



Half-width



1U/2U High Density Computes

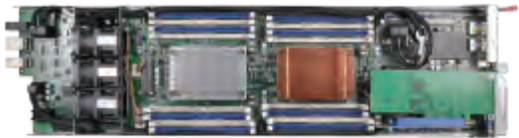


High Performance Cloud Computing Server with Enhanced Storage Capacity and NVMe

Application

- Cloud Computing
- Data Analysis
- Storage Server
- Virtualization

Support up to 2.5" SATA3 HDD up to 6Gb/s



EP2C612D16HM



2 x 1200W PSU (1+1 Redundant)

2U4N-R/24S



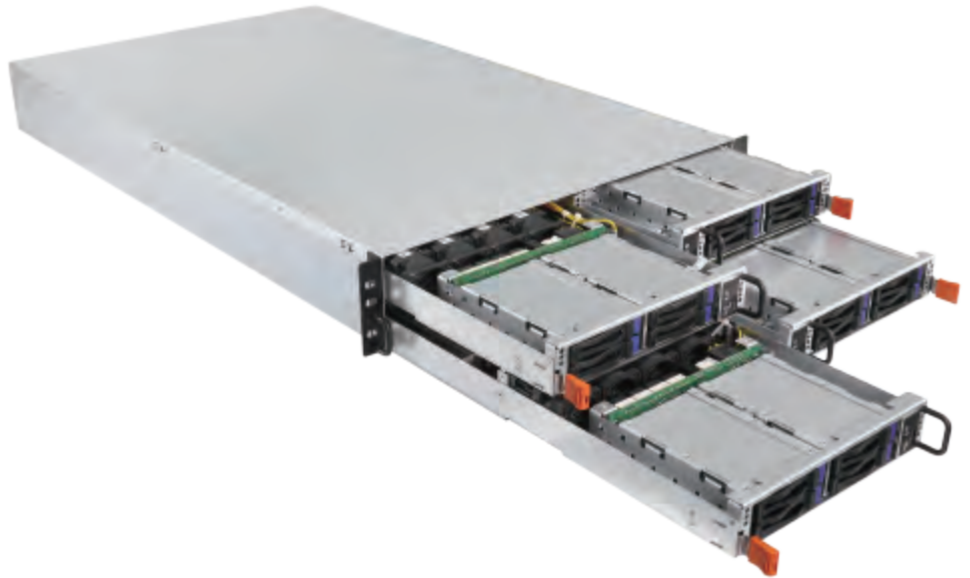
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	800mm x 449mm x 87mm(31.5" x 17.7" x 3.4")
	Support MB Size	Half, 18.6" x 6.5"(EP2C612D16HM)
Front Panel	Buttons	Power On/Standby button, Reset button(per Node)
	LEDs	UID LED, Power LED (Front Panel per Node)
	I/O Ports	1 x USB2.0 port(per Node)
Storage	External	24x 2.5" SATA HDDs(6GB/s)
	internal	N/A
System Cooling	Fan(Front)	12 x 40*56 system fans
Power Supply	Capacity	2U(1+1)Redundant
	Output Watts	1200W
	Efficiency	Platinum

• Compatible Mezzanine Lan Card: M350, M540, M599



2U4N-F2T

2U4N-F



2011-R3



Half-width



1U/2U High Density Computes

High Performance and High-density Computing Nodes for HPC, Cloud Computing, Internet Security and Science



Support up to 2.5" SATA3 HDD up to 6Gb/s

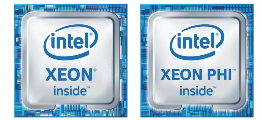


EP2C612D16HM



2x 1200W PSU (1+1 Redundant)

		2U4N-F2T 	2U4N-F 
System Physical Status	Form Factor	2U Rackmount	2U Rackmount
	Chassis Dimension	750 X 448 X 86 (mm)	750 X 448 X 86 (mm)
	Support MB Size	Half (OCP), 6.5" x 20"	Half (OCP), 6.5" x 20"
Front Panel	Buttons	Power Button, Reset Button	Power Button, Reset Button
	LEDs	Power LED, UID LED	Power LED, UID LED
	I/O Ports	USB 2.0 Port x1	USB 2.0 Port x1
Storage	Drive Bay	NA	NA
System Cooling	Fan (Front)	16 x 40*56 mm system fans	16 x 40*56 mm system fans
Power Supply	Capacity	2 (1+1) Redundant	2 (1+1) Redundant
	Output Watts	1200W	1200W
	Efficiency	Platinum	Platinum
Compatible Motherboard		EP2C612D16HM-2T	EP2C612D16HM



3U8G+



1151



NVIDIA
TESLA



AMD
FIREPRO



High-density and High Expandable GPU Server for Scale-out HPC Platform, Parallel Computing, Rendering Machine, Visualization, and Big Data Analysis



6x 2.5" HDD

4x 1200W PSU (3+1 Redundant)

3U8G+

System Physical Status	Form Factor	3U Rack
	Chassis Dimension	711 x 430 x 130.5 mm
	Support MB Size	CEB, 12" x 10.5" (EP2C612D16FM2)
Front Panel	Buttons	Power On/Standby button, ID button, System rest button, NMI button
	LEDs	Power LED, Identification LED, Hard drive activity LED, 4x Network activity LEDs, System event LED
	I/O Ports	2 x USB 2.0 port
Storage	External	6* 2.5" SATA HDD
System cooling	Fan	8 x 80*38 system fans
GPU support	GPU card qty	16pcs single width GPU card (x8) or 8pcs double width GPU card (x16)
Power Supply	Capacity	4(3+1), Redundant 1200W@200Vac-264vAC
	Efficiency	Platinum
	Switch Board	PLX8747x4
Additional PCIe switch	Switch IC	PLX8747x4
	Input Connector	Card edge golden nger x2 for PDBMicro card
Mezzanine		Front Right Angle 2 x 16 from each CPU to Midplane, total 4 x 16 (need to bundle with ASRock Rack system board) x8 Mezzanine Slot Support mezzanine card with Lan (2x 10GBase-T) by Intel@ X540 or 2x SFP+ by Intel@82599ES or 2x GLAN by Intel@i350) or Storage (LSI SAS 3008)

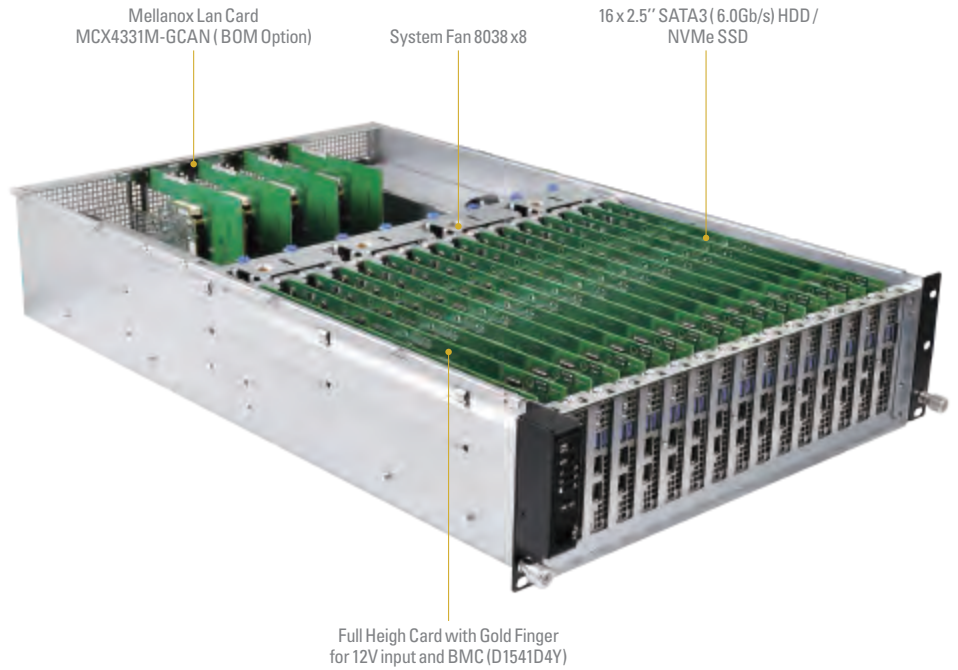
- Compatible Mezzanine Lan Card: M350, M540, M599
- Compatible Mezzanine Storage Card: M3008S



3U16N



SOC



Up to 16 of Xeon D Nodes for HPC Platform, Parallel Computing with Multi-Roots(Shared I/O Interface) to 200G Optical Network



MB: D1541D4Y



4 x 750W PSU (3+1 Redundant)

3U16N



System Physical Status	Form Factor	3U Rackmount
	Chassis Dimension	712mm x 444.5mm x 130mm(28" x 17.5" x 5.1")
	Support MB Size	Half, 4.2" x 12.2"(D1540D4Y)
Front Panel	Buttons	Power Button, UID Button(per Node)
	LEDs	N/A
	I/O Ports	2 x USB3.0 port(per Node)
Storage	External	N/A
	internal	16x 2.5" SATA / NVMe SSD
System Cooling	Fan (Front)	8 x 80*38 system fans
Power Supply	Capacity	3U(3+1)Redundant
	Output Watts	750W
	Efficiency	Platinum



4U10G-F



Intel PHI



NVIDIA TESLA



AMD FIREPRO



Deep Learning, AI, Scale-out HPC Platform, Parallel Computing



5 x 80*38 System Fans (From Rear)



6x 2.5" HDD Up to 6Gb/s

4 x 1600W PSU (3+1 Redundant)

4U10G-F



System Physical Status	Form Factor	4U Rack
	Chassis Dimension	170.35mm*430mm*800mm(with 4U cover)
	Support MB Size	CEB, 12" x 10.5" (EP2C612D16FM2)
Front Panel	Buttons	Power On/Standby button, ID button, System rest button, NMI button
	LEDs	Power LED, Identificaiton LED, Hard drive activity LED, 4x Network activity LEDs, System event LED
	I/O Ports	2 x USB 2.0 port, 1x VGA port
Storage	External	6*2.5" SATA HDD
System cooling	Fan	9 x 80*38 system fans (5 pcs for rear)
GPU support	GPU card qty	16pcs single width GPU card (x8) or 8pcs double width GPU card (x16)
Power Supply	Capacity	4(3+1), Redundant
	Output Watts	1600W
	Efficiency	Platinum
Switch Board	Switch IC	PLX 8796 x 2
	Topology	Single Root Topology, Micro card connector vertical(80pin) x4 for IPB
Additional PCIe switch		Front Right Angle 2 x 16 from each CPU to Midplane, total 4 x 16 (need to bundle with ASRock Rack system board)
GPGPU Cards	GPGPU Watts	Max 300w /per card
	Support GPGPU	10 x GPGPU card or 8 x GPGPU/MIC + 4 x single width card(x8)

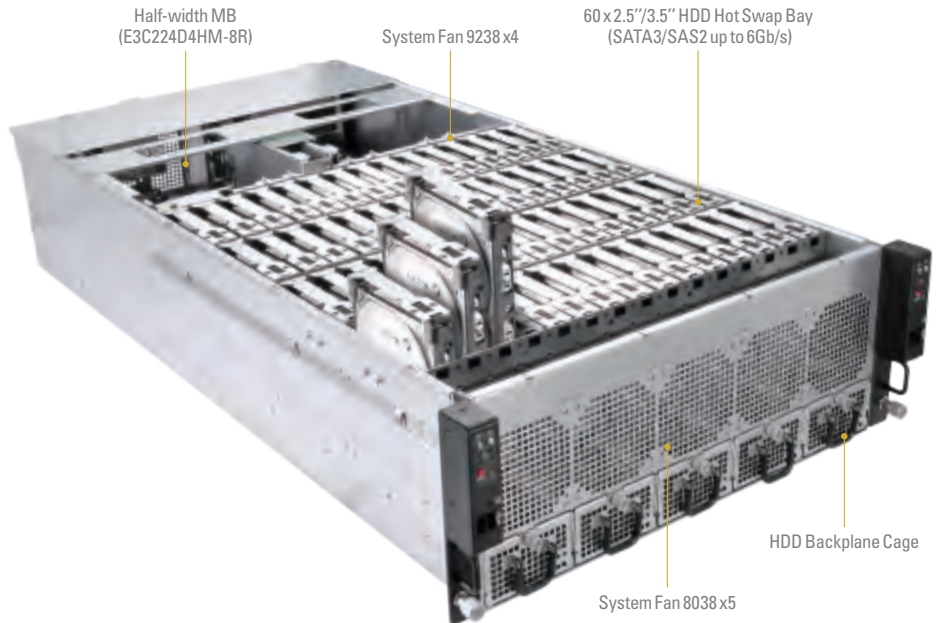


4U60L series

4U60LW_HA

4060LW_Dual Node

4U60LW_Single Node



Storage



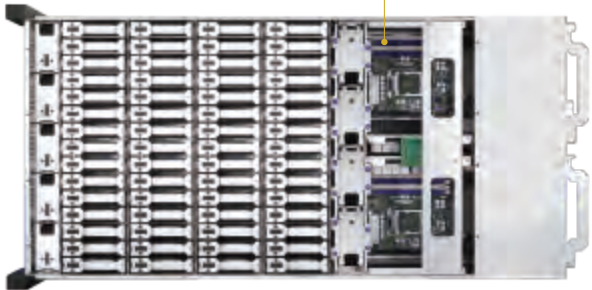
Half-width



SAS2 6Gb/s




SBB Like Dual Nodes for High Performance HA Storage Server

MB Inside (HA/Zoning*2pcs, JBOD*1pcs)



4 x 800W PSU (3+1 Redundant)



		4U60LW_HA 	4U60LW_Dual Node 	4U60LW_Single Node 
System Physical Status	Form Factor	4U Rackmount	4U Rackmount	4U Rackmount
	Chassis Dimension	35.4" x 16.9" x 6.94" (900 x 430 x 176.5 mm)	35.4" x 16.9" x 6.94" (900 x 430 x 176.5 mm)	35.4" x 16.9" x 6.94" (900 x 430 x 176.5 mm)
	Support MB Size	Half EEB x2, 13"x5.96" (E3C224D4HM-8R)	Half EEB x2, 13"x5.96" (E3C224D4HM-8R)	Half EEB x1, 13"x5.96" (E3C224D4HM-8R)
Front Panel	Buttons	2 x Power On/Off buttons, 2 x ID buttons, 2 x System reset buttons, 2 x NMI buttons		
	LEDs	2 x Power LEDs, 2 x ID LEDs, 2 x HDD activity LEDs, 8 x LAN activity LEDs, 2 x System event LEDs		
	I/O Ports	4 x USB 2.0 ports		
Storage	Drive bay	60 x 3.5" Bay HDD + 4 x 2.5" Bay HDD	60 x 3.5" Bay HDD + 4 x 2.5" Bay HDD	60 x 3.5" Bay HDD + 4 x 2.5" Bay HDD
System Cooling	Fan (Front)	5 x 80*38 mm system fans	5 x 80*38 mm system fans	5 x 80*38 mm system fans
	Fan (Middle)	4 x 92*38 mm system fans	4 x 92*38 mm system fans	4 x 92*38 mm system fans
Power Supply	Capacity	4 (3+1) Redundant	4 (3+1) Redundant	4 (3+1) Redundant
	Output Watts	750W	750W	750W
	Efficiency	Platinum	Platinum	Platinum
Expander Board	Expander	LSI 3X40R (x2)	LSI 3X40R (x1)	LSI 3X40R (x1)
	Input connector	Card edge connector x2	Card edge connector x2	Card edge connector x2
Ethernet	Lan Controller	2 x Intel i210 x2	2 x Intel i210 x2	2 x Intel i210 x2
Expansion slot	Mezzanine		x8 Mezzanine card to support 10G Ethernet	

- Compatible Motherboard: E3C224D4HM-8R , E3C224D4HM
- Compatible Mezzanine Lan Card: M350, M540, M599