



Product Brief

- Dual Socket R (LGA2011), supports Intel® Xeon® 5-1600/2600/4600 & v2 series
- Supports Quad Channel DDR3 1600 memory, 8 DIMM slots, Max. 128GB
- 5 PCIe 3.0 x16 slots (PCIE3/PCIE6/PCIE7 : x16 mode, PCIE5/PCIE4: x16/x0 or x8/x8 mode)
- 1 PCIe 3.0 x4, 1 PCI
- ASPEED AST2300 graphics
- 1 VGA : D-Sub
- 2 SATA3 (6.0 Gb/s), 8 SATA2 (3.0 Gb/s) by Intel® C602, Supports RAID 0, 1, 5, 10
- 4 SATA3 (6.0 Gb/s) by Marvell SE9230, Supports RAID 0, 1, 10
- 7 USB 2.0 (2 from rear I/O, 4 from onboard headers, 1 Type A port)
- Integrated IPMI 2.0 with KVM and Dedicated LAN (RTL8211E)
- 2 Intel® 82574L LAN, Support PCIE Dual Gigabit LAN with Teaming function

Specifications

Physical Status	Form Factor	- SSI EEB
	Dimensions	- 12" x 13" (30.5 cm x 26.7 cm)
Processor System	CPU	- Intel® Xeon® processor E5-1600*/2600/4600 & v2 series - Supports Hyper-Threading Technology * E5-1600 supports single socket.
	Socket	- Dual Socket R (LGA2011)
	Power Phase	- 6 +1 Power Phase Design
	Chipset	- Intel® C602
System Memory	Capacity	- 8x 240-pin DDR3 DIMM slots - Support up to 128GB DDR3 R/LR DIMM ; 64GB ECC/non-ECC unbuffered UDIMM
	Type	- Quad Channel DDR3 memory technology - Supports DDR3 1600/1333/1066 R/LR ECC and UDIMM
	Voltage	- 1.5V, 1.35V
Expansion Slot	PCIe 3.0 x 16	5 slots - 3 x PCIe3/PCIE6/PCIE7 : x16 mode - 1 x PCIe4: x8/x0 mode - 1 x PCIe5: x16/x8 mode
	PCIe 3.0 x 4	- 1 slot
	PCIe 2.0 x 1	- NA
	PCI	- 1 slot
Storage	SATA Controller	- Intel C602 : 2 x SATA3 6.0 Gb/s , 8 x SATA2 3.0 Gb/s , support RAID 0, 1, 5, 10 and Intel Rapid Storage 3.0 , NCQ, AHCI and "Hot Plug" functions
	Additional SATA Controller	- Marvell SE9230: 4 x SATA3 6.0 Gb/s , support RAID 0, 1, 10 , NCQ, AHCI and "Hot Plug" functions
Ethernet	Interface	- Gigabit LAN 10/100/1000 Mb/s
	IPMI Dedicated GLAN LAN Controller	- 1 x Realtek RTL8211E for dedicated management GLAN - 2 x Intel® 82574L - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Quad LAN with Teaming function - Supports PXE
Management	BMC Controller	- ASPEED AST2300
	IPMI Dedicated GLAN Features	- 1 x Realtek RTL8211E for dedicated management GLAN - Watch Dog - NMI
Graphics	Controller	- ASPEED AST2300
	VRAM	- DDR3 16MB
	Output	- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz
Rear Panel I/O	PS/2 KB/Mouse	- 2
	VGA Port	- 1 x D-Sub
	USB 2.0 Port	- 2
	LAN Port	- 2 x RJ45 Gigabit Ethernet LAN ports - 1 x RJ45 Dedicated IPMI LAN port - LAN Ports with LED (ACT/LINK LED and SPEED LED)
	Serial Port	- 1 (COM1)
	Type A USB 2.0 Connector	- 1
Internal Connector	USB 2.0 Header	- 2 (each support 2 USB 2.0)
	1x COM from BMC	- 1 (COM2)
	80 Debug Port LED	- 1
	Auxiliary Panel Header	- 1 (includes chassis intrusion , location button & LED , front LAN LED)
	Front Panel	- 1
	Speaker(4pin)	- 1
	Thermal Sensor Header	- 1
	Buzzer	- 1
	TPM Header	- 1
	IPMB Header	- 1
	Fan Header	- 8 (8 x 4-pin or 6 x 4-pin, 2 x 3-pin) ** ** CPU fan headers have 3-pin and 4-pin ones. Two types couldn't be used at the same time.
	ATX Power	- 1 (24-pin) + 2 (8-pin)
System BIOS	BIOS Type	- 64Mb AMI UEFI Legal BIOS with GUI support
	BIOS Features	- Plug and Play (PnP) - ACPI 1.1 Compliance Wake Up Events - SMBIOS 2.3.1 Support - DRAM Voltage Multi-adjustment - ASRock Instant Flash
Hardware Monitor	Temperature	- CPU Temperature Sensing - System Temperature Sensing
	Fan	- CPU/Rear/Front Fan Tachometer - CPU Quiet Fan (Allow CPU Fan Speed Auto-Adjust by CPU Temperature) - CPU/Rear/Front Fan Multi-Speed Control
Support OS	Voltage	- Voltage Monitoring: CPU1/2, DRAM1/2, VTT1/2, VCCSA1/2, 3V/5V/12V, +1.05V_PCH, +BAT, 3VSB, 5VSB
	OS	- Microsoft® Windows® Server 2008 / 2008 R2 / Linux compliant
Environment	Temperature	- Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C
	Humidity	- Non operation humidity: 20% ~ 90% (Non condensing)

Board Diagram

EP2C602 R1.00

