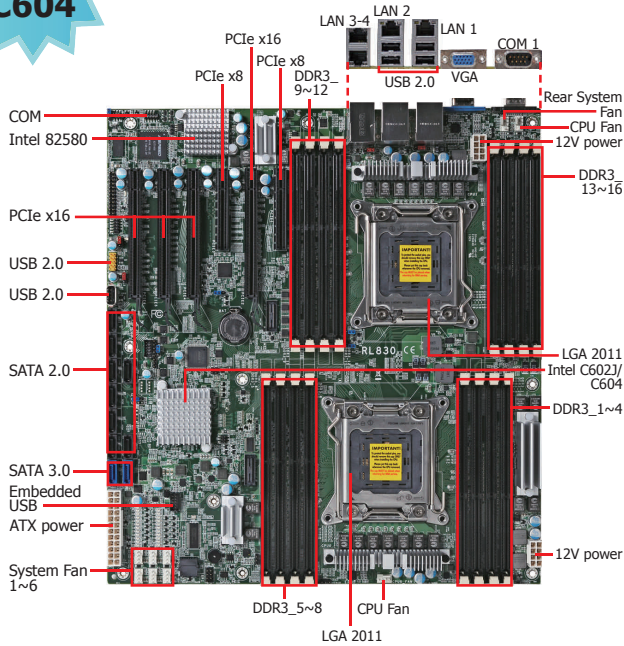


DFI® RL830-C602/C604 EATX

**C602J/
C604**

Server-grade

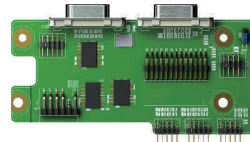


Vertical USB port for securing USB flash drive

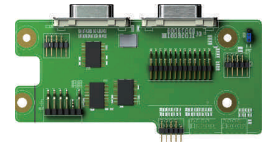
Features

CHIPSET	Intel® C602J/C604
CPU	Dual Intel® Xeon® E5-2600 v2 processors
MEMORY	16 DDR3 DIMM up to 512GB
EXPANSION	4 PCIe x16 2 PCIe x8
DISPLAY OUTPUTS	1 VGA
LAN	4 Gigabit LAN ports
COM	2 COM
USB	8 USB 2.0
STORAGE	6 SATA: 2 SATA 3.0, 4 SATA 2.0 (-C602) 10 SATA: 2 SATA 3.0, 8 SATA 2.0 (-C604)

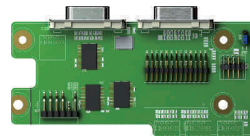
3 Modules for Additional COM/Parallel Ports (via the LPC connector)



EXT-6C1PR
- 6 COM
- 1 Parallel



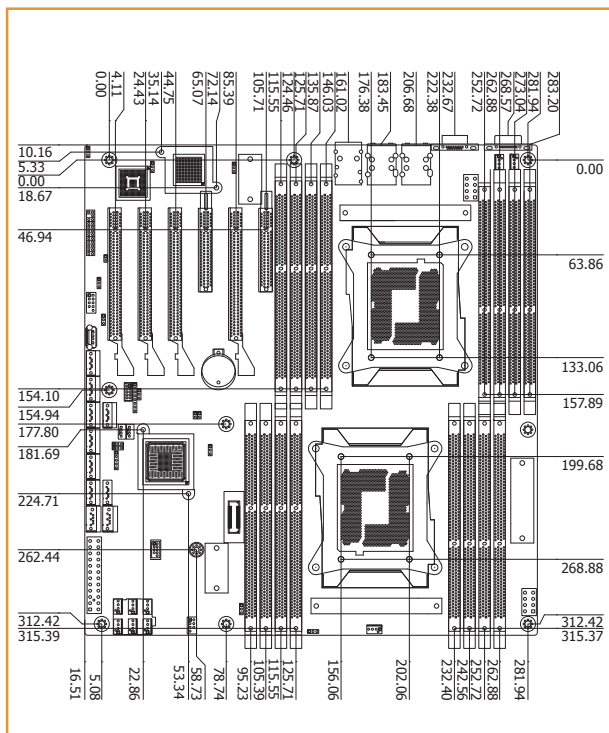
EXT-4C1PR
- 4 COM
- 1 Parallel



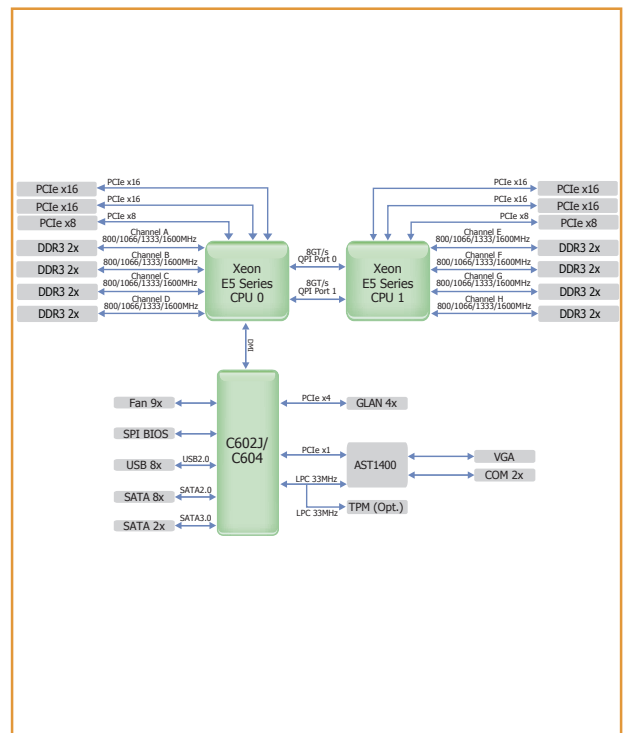
EXT-2C1PR
- 2 COM
- 1 Parallel

NOTE:
To support the additional COM/Parallel ports, please contact your sales representative for the LPC module and its BIOS.

Mechanical Drawing



Block Diagram



Specifications

Dual Intel® Xeon® Processors

PROCESSOR

- 2 LGA 2011 sockets
- Dual Intel® Xeon® E5-2600 v2 processors
 - 3rd Generation processors (22nm process technology)
 - : Intel® Xeon® E5-2658 v2 (25M Cache, up to 2.4GHz); 95W
 - : Intel® Xeon® E5-2648L v2 (25M Cache, up to 1.9GHz); 70W
 - : Intel® Xeon® E5-2628L v2 (20M Cache, up to 1.9GHz); 70W
 - : Intel® Xeon® E5-2618L v2 (15M Cache, up to 2.0GHz); 50W
- 8 GT/s Intel® QPI

CHIPSET

- Intel® C602J/C604 Express Chipset

SYSTEM MEMORY

- 16 240-pin DDR3 sockets support:
 - Registered memory (RDIMM)
 - LV-RDIMM
 - Unbuffered memory (UDIMM) with ECC/non-ECC
 - Load Reduced memory (LR-DIMM)
- Supports DDR3 800/1066/1333/1600MHz
- Each processor supports 4 channel memory interface
- Supports up to 512GB system memory
- 1Gb, 2Gb, 4Gb and 8Gb DDR3 DRAM technologies supported for the following devices:
 - UDIMMs x8, x16
 - RDIMMs x4, x8
 - LRDIMMs x4, x8 (2Gb and 4Gb only)

EXPANSION SLOTS

- 4 PCIe x16 Gen 3 slots (PCIe 3.0)
- 2 PCIe x8 Gen 3 slots (PCIe 3.0)

ONBOARD GRAPHICS FEATURES

- Aspeed AST 1400
- Display port: 1 VGA

ONBOARD LAN FEATURES

- 1 Intel® 82580 PCI Express Gigabit Ethernet controller supports 4 LAN ports
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA (SATA) INTERFACE

- 6 Serial ATA ports (Intel® C602J)
 - 2 SATA 3.0 ports with data transfer rate up to 6Gb/s
 - 4 SATA 2.0 ports with data transfer rate up to 3Gb/s
- 10 Serial ATA ports (Intel® C604)
 - 2 SATA 3.0 ports with data transfer rate up to 6Gb/s
 - 8 SATA 2.0 ports with data transfer rate up to 3Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller
- Supports RAID 0/1/5/10

EXTERNAL I/O

- 1 DB-9 RS232 serial port
- 1 VGA port
- 4 USB 2.0/1.1 ports
- 4 RJ45 LAN ports

INTERNAL I/O

- 1 connector for 2 external USB 2.0/1.1 ports
- 1 Embedded USB connector for eUSB SSD
- 1 vertical Type A USB 2.0 port
- 1 connector for an external RS232 serial port
- 6 Serial ATA ports (Intel® C602J)
- 10 Serial ATA ports (Intel® C604)
- 1 24-pin ATX power connector
- 2 8-pin 12V power connector
- 1 front panel connector
- 2 CPU fan connectors
- 6 system fan connectors
- 1 rear system fan connector

TRUSTED PLATFORM MODULE (TPM) - optional

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

BIOS

- AMI BIOS
 - 128Mbit SPI BIOS

WATCHDOG TIMER

- Software programmable from 1 to 255 seconds

ENERGY EFFICIENT DESIGN

- Supports ACPI
- System Power Management
- Wake-On-Events include:
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - RTC timer to power-on the system
- CPU stopped clock control
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors 15 voltages and failure alarm
- Monitors CPU/system fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed

POWER

- EPS12V

OS SUPPORT

- Windows 7 Ultimate x64 & SP1 (64-bit)
- Windows 8 Enterprise x64 (64-bit)
- Windows Server 2003 x64 (64-bit)
- Windows Server 2008 R2 x64 (64-bit)
- Windows Server 2012 x64 (64-bit)

TEMPERATURE

- Operating: 0°C to 50°C
- Storage: -20°C to 85°C

HUMIDITY

- 10% to 90%

DIMENSIONS

- EATX form factor
- 305mm (12") x 330mm (13")

Packing List

- 1 RL830 board
- 1 Serial ATA data cable
- 1 I/O shield
- 1 DVD
- 1 QR (Quick Reference)

Optional Items

- USB port cable
- COM port cable
- Serial ATA data cable
- Serial ATA power cable
- I/O shield
- 1 LPC module kit