DL310-C226

Workstation

C226

- Line-in/Surround
- Line-out
- Mic-in/Center+Subwoofer
- LAN 2
- LAN 1
- DVI-I
- COM 2
- PS/2 KB/MS
- USB 3.0
- HDMI
- COM 1
- USB 2.0

- DIO
- PCIe x1
- PCIe x4
- PCIe x16
- PCIe x16
- USB 2.0
- USB 2.0
- Intel C226
- System fan 1
- SATA 3.0
- ATX power
- COM 3~6
- +12V power
- CPU Fan
- LGA 1150
- System fan 2
- Parallel
- DDR3_1
- DDR3_2
- DDR3_3
- DDR3_4
- LPC
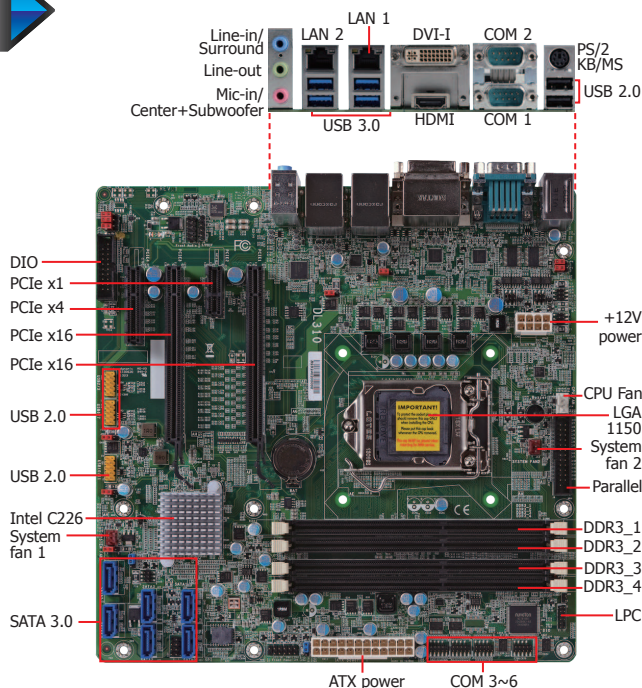
▶ Features

MEMORY	4 DDR3/DDR3L DIMM up to 32GB
EXPANSION	2 PCIe x16 (2 x8 signal)
	1 PCIe x4
	1 PCIe x1
DISPLAY OUTPUTS	1 HDMI, 1 DVI-I
LAN	2 LAN
COM	6 COM
USB	12 USB: 4 USB 3.0, 8 USB 2.0
PARALLEL	1 Parallel
STORAGE	6 SATA 3.0
DIO	8-bit DIO

DDR3/DDR3L   AMT 9.0   SATA 3.0   USB 3.0   COM
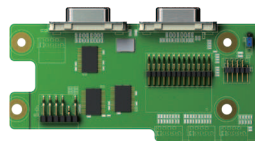
3 Modules for Additional COM/Parallel Ports (via the LPC connector)
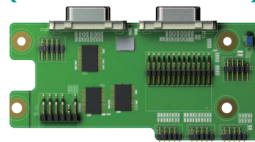
EXT-6C1PR
- 6 COM
- 1 Parallel
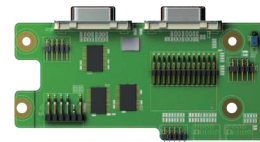
EXT-4C1PR
- 4 COM
- 1 Parallel

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

Coming Soon

▶ Block Diagram

- VRD 12
- Vcore Power
- Core i7/i5/i3
- Channel A 1333/1600MHz
- DDR3 DIMM 2x
- PCIe x16
- Channel B 1333/1600MHz
- DDR3 DIMM 2x
- DMI FDI HOST_CLKP/N
- DVI-I
- R.G.B
- TMDS Bus
- LEVEL SHIFT SKT
- TMDS Bus
- PCIe x1
- GLAN 1/GLAN 2
- PCIe x1
- Mini PCIe x1
- PCIe 100MHz
- DVI-I
- TMDS Bus
- Converter
- DP Bus
- PCIe x1
- JMB368 to IDE
- HDMI
- TMDS Bus
- Converter
- DP Bus
- PCIe x4
- PCIe x4
- USB 4x
- USB2.0
- SPI Bus
- SPI BIOS
- USB 6x
- SATA 4x
- SATA2.0
- PCI 33MHz
- PCI x2
- SATA 2x
- SATA3.0
- HD Audio
- TPM (Opt.)
- LPC Bus
- LPC Bus
- F81217U
- COM 4x
- COM x2
- H/W Monitor
- PS/2 K/B
- PS/2 Mouse
- Super IO with WDT
- Digital I/O 8-bit

Coming Soon

▶ Specifications

PROCESSOR
- LGA 1150 socket for:
  - 4th generation Intel® Xeon® processors (22nm process technology)
    - : Intel® Xeon® E3-1275 v3 (8M Cache, up to 3.9GHz); 84W
    - : Intel® Xeon® E3-1268L v3 (8M Cache, up to 3.3GHz); 45W
    - : Intel® Xeon® E3-1225 v3 (8M Cache, up to 3.6GHz); 84W

CHIPSET
- Intel® C226 Express chipset

SYSTEM MEMORY
- Four 240-pin DDR3/DDR3L DIMM sockets
- Supports DDR3/DDR3L 1333/1600MHz when operating at 1.5V
- Supports dual channel memory interface
- Supports up to 32GB system memory
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, ECC

EXPANSION SLOTS
- 2 PCIe x16 Gen 3 slots (PCIe 3.0)
  - 2 x8 signal
- 1 PCIe x4 Gen 2 slot (PCIe 2.0)
- 1 PCIe x1 Gen 2 slot (PCIe 2.0)

ONBOARD GRAPHICS FEATURES
- Intel® HD Graphics
- Display ports: HDMI and DVI-I
- DVI-I supports up to 1920x1200 @ 60Hz resolution
- HDMI supports up to 4096x2304 @ 24Hz resolution or 2560x1600 @ 60Hz resolution
- VGA display resolution up to 1920x1200 pixels with 24-bit color @ 60Hz
- Intel® Clear Video Technology
- Intel® Advanced Vector Extensions (Intel® AVX) Instructions
- Supports DirectX 11.1 and OpenGL 4.0

ONBOARD AUDIO FEATURES
- Realtek ALC886 5.1-channel High Definition Audio
- Audio outputs: Mic-in/Center+Subwoofer, line-in/surround and line out
- S/PDIF audio interface

ONBOARD LAN FEATURES
- Intel® I210 PCI Express Gigabit Ethernet controller
- Intel® I217LM with iAMT9.0 Gigabit Ethernet Phy
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA (SATA) INTERFACE
- 6 SATA 3.0 ports with data transfer rate up to 6Gb/s
  - SATA port 5 provides adequate space for SATA DOM
- Integrated Advanced Host Controller Interface (AHCI) controller
- Supports RAID 0/1/5/10
- Supports Intel® Smart Response Technology

USB INTERFACE
- XHCI Host Controller supports up to 4 super speed USB 3.0 ports

INTEL ACTIVE MANAGEMENT TECHNOLOGY (AMT)
- Supports iAMT9.0
- Out-of-band system access
- Remote troubleshooting and recovery
- Hardware-based agent presence checking
- Proactive alerting
- Remote hardware and software asset tracking

TRUSTED PLATFORM MODULE (TPM) - optional
- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

REAR PANEL I/O PORTS
- 1 mini-DIN-6 port for PS/2 mouse/keyboard
- 4 USB 3.0/2.0/1.1 ports
- 2 USB 2.0/1.1 ports
- 2 DB-9 RS232/422/485 serial ports (RS232 and/or power)
- 1 HDMI port
- 1 DVI-I port
- 2 RJ45 LAN ports
- Line-in/surround, Line out, and Mic-in/Center+Subwoofer jacks

I/O CONNECTORS
- 3 connectors for 6 external USB 2.0/1.1 ports
- 4 connectors for 4 external RS232 serial ports
- 1 parallel connector
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 S/PDIF connector
- 1 LPC connector
- 6 SATA 3.0 ports
- 1 24-pin ATX power connector
- 1 8-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

BIOS
- AMI BIOS
  - 64Mbits SPI BIOS

WATCHDOG TIMER
- Software programmable from 1 to 255 seconds

ENERGY EFFICIENT DESIGN
- Supports ErP Lot6 power saving (optional)
- Supports ACPI
- System Power Management
- Wake-On-Events include:
  - Wake-On-PS/2 KB/Mouse
  - 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 VCORE/5V/3.3V/V_DIMM/12V/5VSB voltages and failure alarm
- Monitors CPU/system fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed

POWER CONSUMPTION
- TBD

OS SUPPORT
- Windows XP Professional x86 & SP3 (32-bit)
- Windows XP Professional x64 & SP2 (64-bit)
- Windows 7 Ultimate x86 & SP1 (32-bit)
- Windows 7 Ultimate x64 & SP1 (64-bit)
- Windows 8 Enterprise x86 (32-bit)
- Windows 8 Enterprise x64 (64-bit)

TEMPERATURE
- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

HUMIDITY
- 10% to 90%

DIMENSIONS
- microATX form factor
- 244mm (9.6") x 244mm (9.6")

▶ Packing List

• 1 DL310 motherboard
• 1 Serial ATA data cable
• 1 I/O shield
• 1 DVD
• 1 QR (Quick Reference)

▶ Optional Items

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