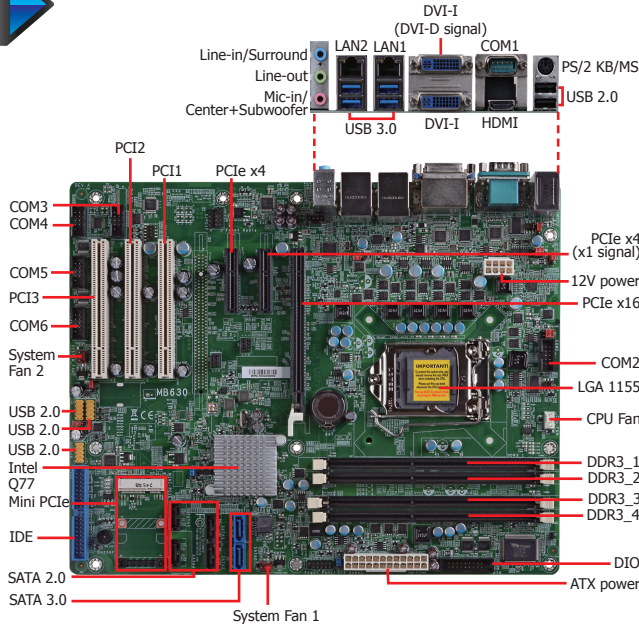




# MB630-CRM

Desktop

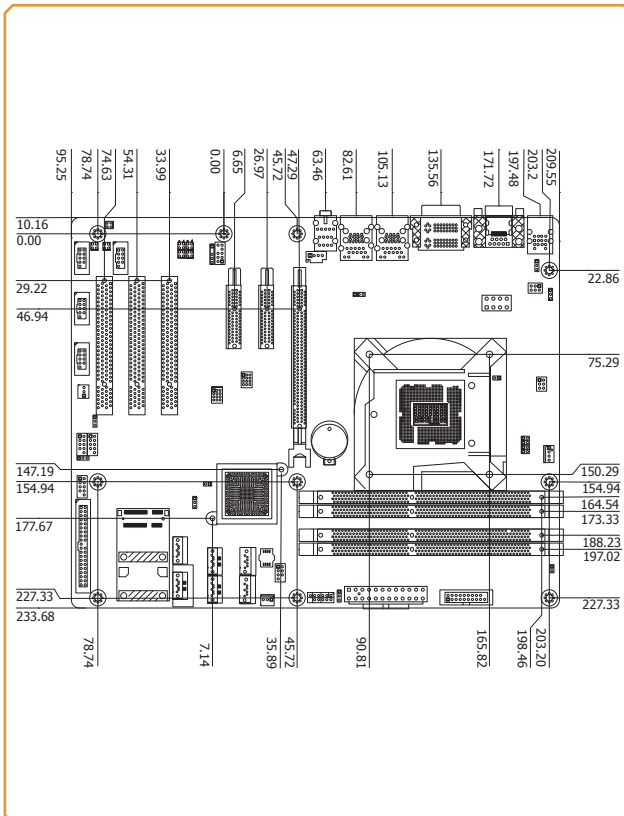
Q77



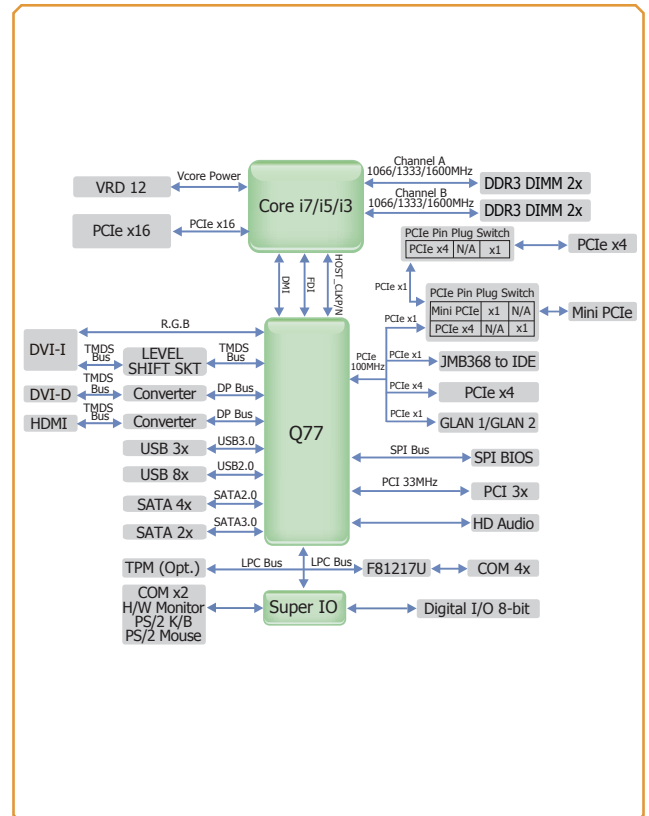
## Features

MEMORY	4 DDR3 DIMM up to 32GB
EXPANSION	1 PCIe x16 2 PCIe x4 (1 x4 and 1 x1 signal) 1 Mini PCIe 3 PCI
DISPLAY OUTPUTS	3 Independent Displays 1 HDMI, 2 DVI-I (1 supports DVI-D signal)
LAN	2 LAN
COM	6 COM
USB	12 USB: 4 USB 3.0, 8 USB 2.0
STORAGE	6 SATA: 2 SATA 3.0, 4 SATA 2.0 1 IDE
DIO	8-bit DIO

## Mechanical Drawing



## Block Diagram



# MB630-CRM

## ► Specifications

### PROCESSOR

- LGA 1155 socket for:
  - 3rd generation Intel® Core™ processors (22nm process technology)
    - : Intel® Core™ i7-3770 (8M Cache, up to 3.9GHz); 77W
    - : Intel® Core™ i5-3550S (6M Cache, up to 3.7GHz); 65W
    - : Intel® Core™ i3-3220 (3M Cache, 3.3GHz); 55W
    - : Intel® Pentium® G2120 (3M Cache, 3.1 GHz); 65W
  - 2nd generation Intel® Core™ processors (32nm process technology)
    - : Intel® Core™ i7-2600 (8M Cache, up to 3.8 GHz); 95W
    - : Intel® Core™ i5-2400 (6M Cache, up to 3.4 GHz); 95W
    - : Intel® Core™ i3-2120 (3M Cache, 3.3 GHz); 65W
    - : Intel® Pentium® G850 (3M Cache, 2.9 GHz); 65W

### CHIPSET

- Intel® Q77 Express chipset

### SYSTEM MEMORY

- Four 240-pin DDR3 DIMM sockets
- Supports DDR3 1333/1600MHz (3rd generation processors)
- Supports DDR3 1066/1333MHz (2nd generation processors)
- 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

- 1 PCIe x16 slot
  - Supports Gen 3.0 (3rd generation processors)
  - Supports Gen 2.0 (2nd generation processors)
- 2 PCIe x4 slots (PCIe 2.0)
  - 1 x4 and 1 x1 signal
- 1 Mini PCIe slot: PCIe and USB signals (PCIe 2.0)
  - Supports half size and/or full size Mini PCIe card
- 3 PCI slots (PCI 2.3: supports universal PCI card)

### ONBOARD GRAPHICS FEATURES

- Intel® 4000 (i7); HD Graphics 2500 (i5/i3/Pentium)
- Display ports: HDMI, 2 DVI-I (1 supports DVI-D signal only)
- HDMI, DVI: resolution up to 1920x1200 @ 60Hz
- VGA: resolution up to 2048x1536 @ 75Hz, 32-bit
- Intel® Clear Video Technology
- Intel® Advanced Vector Extensions (Intel® AVX) Instructions
- Supports DirectX 11 and OGL 3.0

### 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® WG82579LM with iAMT8.0 Gigabit Ethernet Phy
- Intel® WG82574L PCI Express Gigabit Ethernet controller
- 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
  - 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 (SATA port 4 provides adequate space for SATA DOM)
- Integrated Advanced Host Controller Interface (AHCI) controller
- Supports RAID 0/1/5/10

### INTEL ACTIVE MANAGEMENT TECHNOLOGY (AMT)

- Supports iAMT8.0
- 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

## ► Packing List

• 1 MB630-CRM motherboard
• 1 Serial ATA data cable
• 1 I/O shield
• 1 DVD
• 1 QR (Quick Reference)

### USB INTERFACE

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

### 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
- 1 DB-9 serial port
  - Supports RS232/422/485 (RS232 and/or Power)
- 1 HDMI port
- 2 DVI-I ports (1 supports DVI-D signal only)
- 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
- 5 connectors for 5 external serial ports
  - 1 RS232/422/485 (RS232 and/or Power)
  - 4 RS232
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in connector
- 1 S/PDIF connector
- 6 Serial ATA ports (2 SATA 3.0; 4 SATA 2.0)
- 1 IDE connector
- 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
  - 64Mbit SPI BIOS

### ENERGY EFFICIENT DESIGN

- Supports ErP Lot6 power saving (optional)
- ACPI v3.0 specification
- 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
- Watchdog timer function

### 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

- ATX form factor
- 305mm (12") x 244mm (9.6")

### CERTIFICATION

- CE, FCC Class B, RoHS, UL

## ► Optional Items

• USB port cable
• Serial ATA data cable
• Serial ATA power cable
• COM port cable
• IDE cable
• I/O shield
• PS/2 Keyboard/Mouse cable