IPM31
Motherboard layout reference

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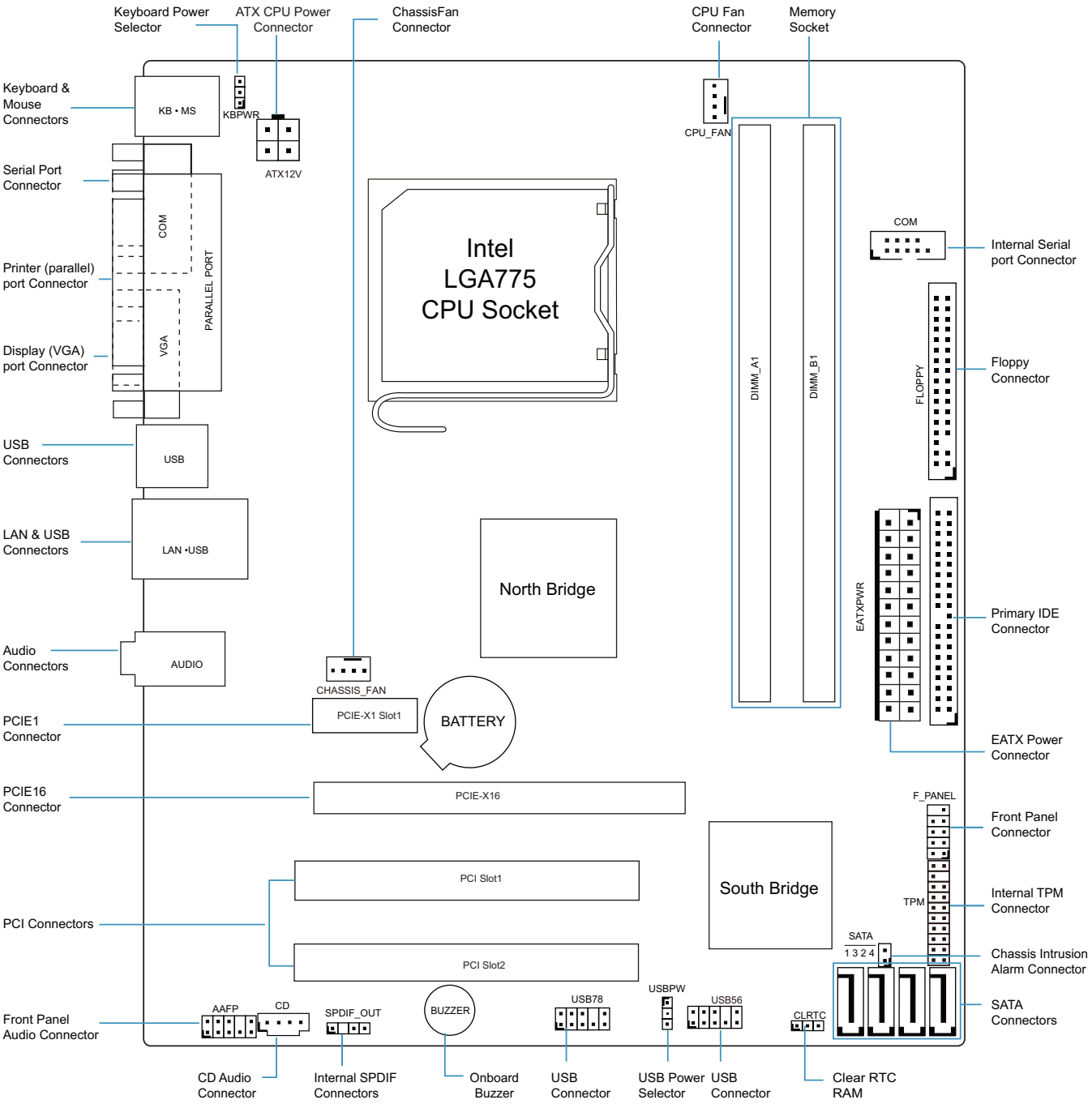
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Oct 2008

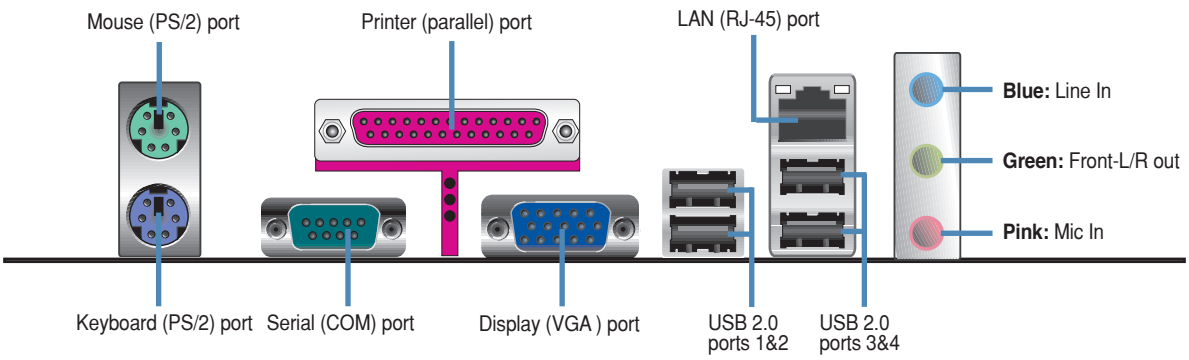
Specifications summary

CPU	**Socket:** Intel Socket 775 **Supports:** Conroe L, Conroe, Wolfdale **Front Side Bus:** 800/1066/1333MHz
Chipset	**MCH (North Bridge):** Intel G31 **ICH (South Bridge):** Intel ICH7
Graphic	Integrated Graphics in North Bridge, DVI/TV-OUT
Memory	Dual channel, 2 slots, Non-ECC, 240-pin DDR2, Un-buffered **Types:** 667/PC2-5300, 800/PC2-6400
Audio	Realtek ALC662 CODEC (6 Channels)
Form factor	microATX: 9.6 in. x 8.0 in.
Expansion slots	1x PCI Express Graphic slt (x16) 1x PCI Express slot (x1) 2x PCI slot
LAN	Realtek RTL8111C PCIe
1394	(none)
USB	8x USB 2.0 ports (4 onboard headers, 4 on rear panel) 12Mbps/480Mbps
Storage	4x SATA ports (4 onboad headers) SATA300, ATA100
BIOS	AMI 4Mb SPI
Rear panel ports	1x PS2 Mouse port + 1x PS2 Keyboard port 1x Parallel (printer) port + 1x Serial (com) port + 1x VGA (display) port 2x USB ports 1x LAN port + 2x USB ports 3x Audio ports
Selectors	USB power, Keyboard power, clear RTC,
Onboard connectors	1x Front panel connector 1x Front panel audio connector 1x SPDIF output connectorr 1x Audio (CD) input connector 2x USB 2.0 dual port connectors 1x Serial (COM) port connector 4x SATA connectors 1x Primary IDE connector 1x Internal TPM connector 1x Chassis intrusion alarm connector
Power connectors	1x 24-pin EATX (+12V EPS power connector) 1x 4-pin ATX (+12V power connector) 1x CPU FAN connector 1x Chassis FAN connector

Motherboard layout



Rear panel connectors



LAN port LED indicators

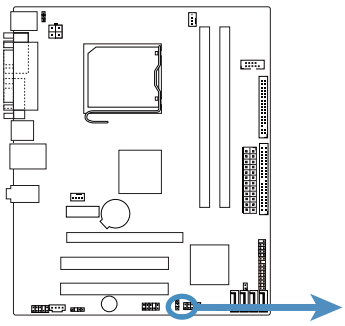
Left (SPEED)
Yellow: 100M Activity Off : 10M Link



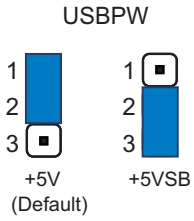
LAN port

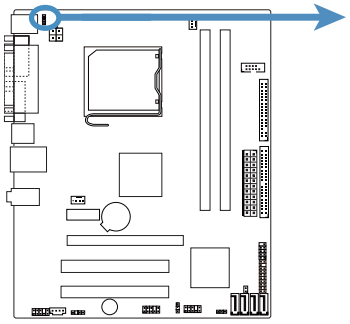
Right (ACTIVITY)
Green : 1Gbit Link Orange: 100M Link Off : 10M Link

Function Selectors

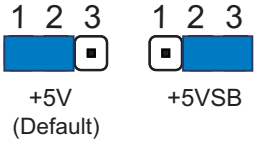


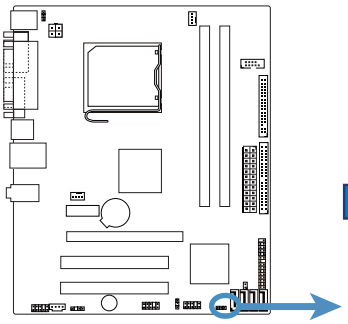
USB POWER SELECTOR



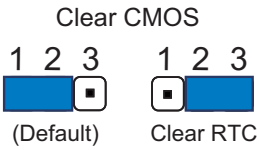


KEYBOARD POWER SELECTOR



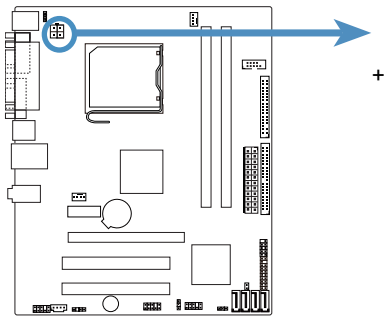


CLEAR RTC RAM

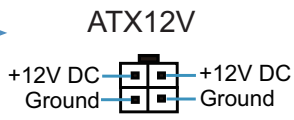


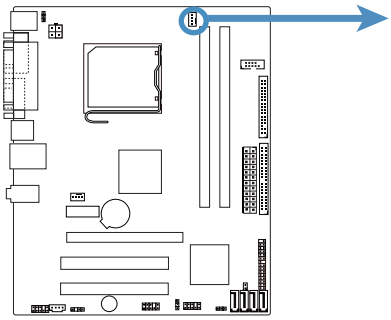
To erase the CMOS RTC RAM user settings:
1. Turn OFF the computer and unplug the power cord.
2. Move the cap to clear for 5 to 10 secs, then move cap back to default.
3. Plug the power cord and turn ON the computer.
4. During the boot process, enter BIOS setup to re-enter user settings.

Internal connectors

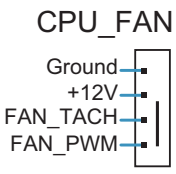


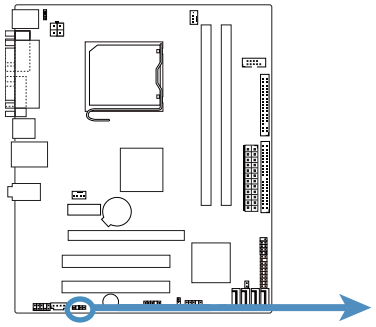
ATX 12V POWER CONNECTOR





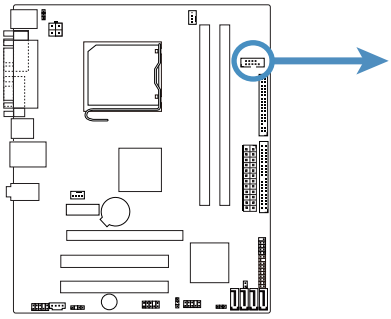
CPU FAN CONNECTOR



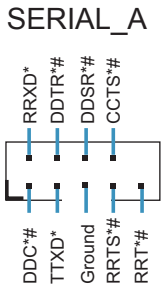


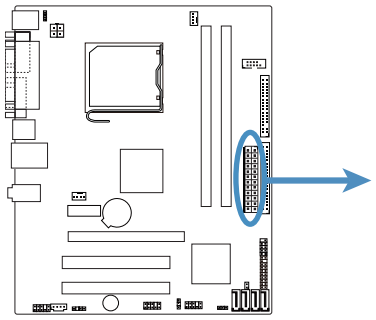
SPDIF AUDIO OUT CONNECTOR



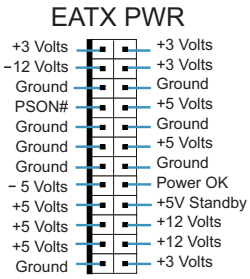


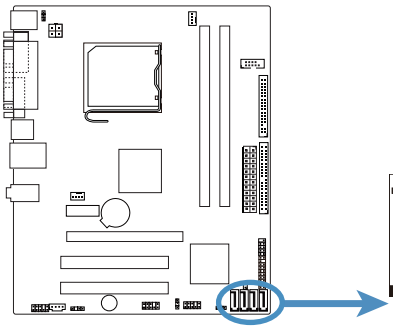
INTERNAL SERIAL PORT CONNECTOR



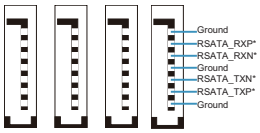


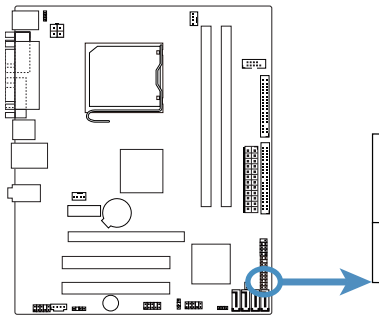
ATX POWER CONNECTOR



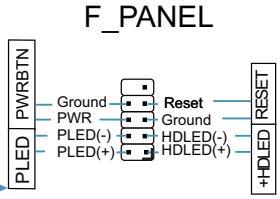


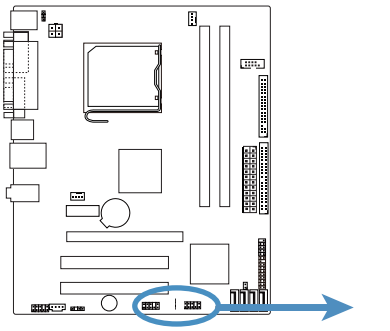
SATA CONNECTORS



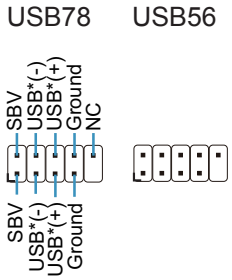


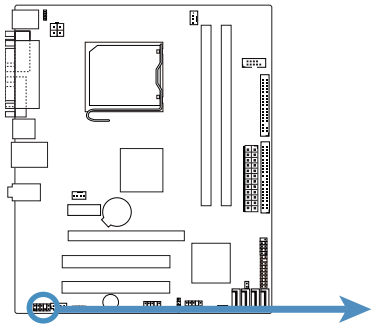
FRONT PANEL CONNECTOR



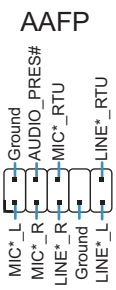


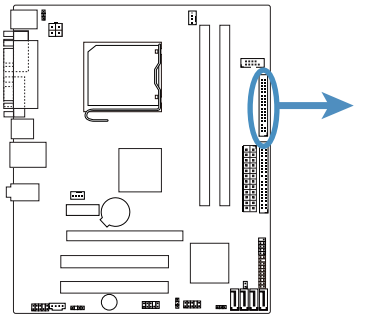
USB CONNECTORS



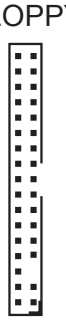


FRONT PANEL AUDIO CONNECTOR

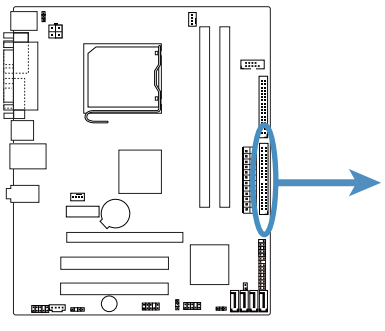




FLOPPY CONNECTOR



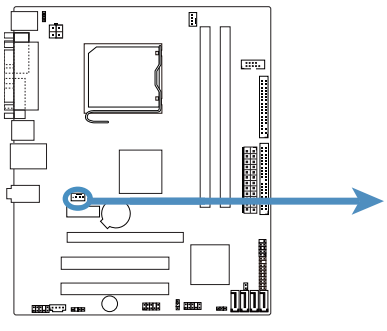
Internal connectors (cont'd)



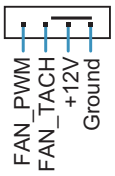
PRIMARY_IDE



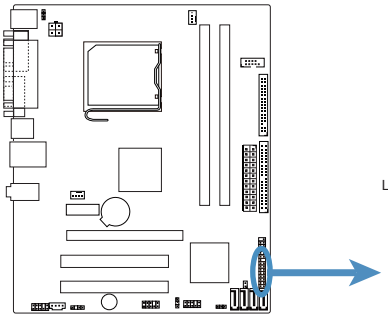
PRIMARY IDE CONNECTOR



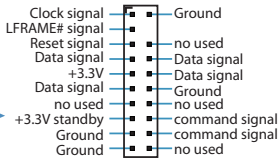
CHASSIS_FAN



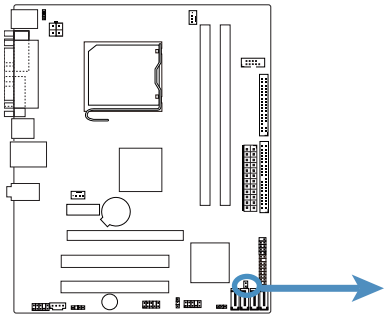
CHASSIS FAN CONNECTOR



TPM



INTERNAL TPM CONNECTOR



INTRUSION



CHASSIS INTRUSION CONNECTOR