



## P5G41C-M LX

### Combo Solution for DDR2 & DDR3 Transition

- DDR3/DDR2 Dual channel Memory
- ASUS Anti-Surge
- Asus Turbo Key
- DirectX10 support
- ASUS Express Gate
- ASUS EPU



#### Intel® Core™2 Quad / Core™2 Duo CPU support

This motherboard supports Intel® LGA775 Core™2 Quad/ Core™2 Duo processors, which are excellent for multitasking, multimedia, and enthusiastic gamers with 1333/1066/800 MHz FSB. This motherboard also supports Intel® CPUs in the 45nm manufacturing process.



#### LGA775 Intel® 45nm Processor Ready

This motherboard supports the latest Intel 45nm CPU which introduces new micro-architecture features for greater performance at a given frequency, up to 50% larger L2 caches, and expanded power management capabilities for new levels of energy efficiency.



#### Dual channel DDR3 1333(O.C.) / DDR2 1066(O.C.) support

The motherboard supports DDR3 1333/1066/800 MHz or DDR2 memory 1066/800/667 MHz to meet the higher bandwidth requirements of the latest operation system, 3D graphics, multimedia, and Internet applications. The dual-channel DDR3/DDR2 architecture doubles the bandwidth of your system memory to boost system performance, eliminating bottlenecks with peak bandwidths of up to 19.2 GB/s.



#### Intel® G41 Chipset

The Intel® G41 Express Chipset is designed to support dual-channel DDR2 1066 (overclocking)/800/667 architecture, 1333/1066/800 Front Side Bus (FSB), PCIe 1.1, and multi-core CPUs. It especially includes Intel® Fast memory bandwidth and reduces the latency of the memory accesses.



#### High Definition Audio

Enjoy high-end sound system on your PC! The onboard 8-channel HD audio (High Definition Audio, previously codenamed Azalia) CODEC enables high-quality 192KHz/24-bit audio output, jack-sensing feature, retasking functions and multi-streaming technology that simultaneously sends different audio streams to different destinations. You can now talk to your partners on the headphone while playing a multi-channel network games. All of these are done on one computer.



#### Gigabit LAN

The on-board LAN controller is a highly integrated GbLAN controller. It is enhanced with an ACPI management function to provide efficient power management for advanced operating systems.



#### ASUS Express Gate

Express Gate is a unique OS built into the motherboard. Five seconds after bootup, you can instantly surf the Internet without entering the Windows OS.

- ASUS Express Gate supports installation on SATA HDDs, USB HDDs and flash drives with at least 1.2GB free disk space.

When installing it on USB HDDs or flash drives, connect the drives to the motherboard USB port before turning on the computer.

- The actual boot time depends on the system configuration.
- ASUS Express Gate supports file uploading from SATA HDDs, ODDs and USB



#### Anti-Surge Protection

This special design prevents expensive devices and the motherboard from damage caused by power surges from switching power supply (PSU).



drives. It supports file downloading to USB drives only.

• ASUS Express Gate complies with the OpenGL standard. Refer to [support.asus.com](http://support.asus.com) for Express Gate source codes.

The ASUS EPU (Energy Processing Unit) provides total system power management by detecting current PC loadings and intelligently moderating power in real-time. It automatically provides the most appropriate power usage to save power and money!



### Serial ATA 3Gb/s technology

This motherboard supports hard drives based on the Serial ATA (SATA) 3Gb/s storage specifications, delivering enhanced scalability and doubling the bus bandwidth for high-speed data saving and retrieval.



### Turbo Key

ASUS Turbo Key allows you to turn the PC power button into an overclocking button. After you easy setup, Turbo Key boosts performances without interrupting ongoing work or games, simply through pressing the button.



### C.P.R.(CPU Parameter Recall)

The BIOS C.P.R. feature automatically restores the CPU default settings when the system hangs due to overclocking failure. C.P.R. eliminates the need to open the system chassis and clear the RTC data. Simply shut down and reboot the system, and the BIOS automatically restores the CPU parameters to their default settings.



### ASUS Q-Fan

ASUS Q-FAN technology intelligently and automatically adjusts the CPU fan speed according to system load and temperature, enabling users to work in distraction-free environment with minimal noise.



### ASUS CrashFree BIOS3

ASUS CrashFree BIOS 3 is an auto-recovery tool that allows you to restore a corrupted BIOS file using the bundled support DVD or USB flash disk that contains the latest BIOS file.



### ASUS EZ Flash2

ASUS EZ Flash 2 is a utility that allows you to update the BIOS without using an OS-based utility.



### ASUS AI NET2

ASUS AI NET2 remotely detects the cable connection immediately after turning on the system, and any faulty cable connections are reported back up to 100 meters at 1 meter accuracy.



### MyLogo2

Personalize your system with customizable boot logo You can convert your favorite photo into a 256-color boot logo for a more colorful and vivid image on your screen.



### Uses 100% All High-quality Conductive Polymer Capacitors!

This motherboard uses all high-quality conductive polymer capacitors onboard for durability, improved lifespan, and enhanced thermal capacity.



### GreenASUS

The motherboard and its packaging comply with the European Union's Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products and packaging to safeguard consumers' health while minimizing the impact on the environment.



## Specifications

CPU	Intel Socket 775 Core™2 Quad/Pentium® dual-core/Core™2 Duo/Celeron dual-core /Celeron® Processors Compatible with Intel® 05B/05A/06 processors Support Intel® 45nm Multi-Core CPU *Refer to <a href="http://www.asus.com">www.asus.com</a> for Intel CPU support list
Chipsatz	Intel G41 /ICH7
Front Side Bus	1333/1066/800 MHz
Memory	2 x DIMM, 8 GB, DDR3 1333*/1066/800 Non-ECC, Un-buffered Memory 2 x DIMM, max. 8 GB, DDR2 1066 (O.C.) / 800 / 667 MHz Non-ECC, Un-buffered memory Dual Channel memory architecture **DDR3 and DDR2 memory can not be used simultaneously

	<p>Use DDR3 memory modules on the black slots and DDR2 memory modules on the blue slots."</p> <p>** Refer to <a href="http://www.asus.com">www.asus.com</a> or user manual for Memory QVL (Qualify Vendor List)</p> <p>*** When installing total memory of 4GB capacity or more, Windows® 32-bit operation system may only recognize less than 3GB. Hence, a total installed memory of less than 3GB is recommended.</p>
Expansion Slots	<p>x PCIe x16 1 x PCIe x1 1</p> <p>x PCI</p> <p>2</p>
VGA	<p>Integrated Intel GMA X4500 graphics</p> <p>Maximum shared memory of 1G</p> <p>Supports RGB with max. resolution 2048 x 1536 (@75Hz)</p> <p>Supports Microsoft® DirectX® 10</p>
Storage	<p><b>Southbridge</b></p> <p>1 x UltraDMA 133/100/66</p> <p>4 x SATA 3 Gb/s ports</p>
LAN	<p>PCIe Gb LAN</p>
Audio	<p>1708S 8-Channel AUDIO CODEC</p> <p>*Choose the chassis with HD audio module in front panel to support 8-Channel audio output</p> <p>Supports Jack-detect and Multi-Streaming technologies</p> <p>Supports S/PDIF out interface</p>
USB	<p>8 USB 2.0 ports (4 ports at mid-board, 4 ports at back panel)</p>
ASUS AI Lifestyle Features	<p>ASUS MyLogo 2</p> <p>ASUS EZ Flash 2</p> <p>ASUS CrashFree BIOS 3</p> <p>ASUS Q-Fan</p> <p>ASUS Anti-Surge</p> <p>ASUS EPU-L</p> <p>ASUS Express Gate</p> <p>Turbo Key</p> <p>AI NET2</p>
Overclocking Features	<p><b>SFS (Stepless Frequency Selection)</b></p> <p>- FSB tuning from 200MHz to 800MHz at 1MHz increment</p> <p><b>Overclocking Protection</b></p> <p>- ASUS C.P.R. (CPU Parameter Recall)</p>
Special Features	<p>100% All High-quality Conductive Polymer Capacitors</p>
Back Panel I/O Ports	<p>x Parallel</p> <p>1 x D-Sub</p> <p>1 3 x Audio jacks x PS/2 Keyboard</p> <p>1 x PS/2 Mouse</p> <p>1 x RJ45 port</p> <p>1 x USB 2.0/1.1</p> <p>4 x COM port</p> <p>1</p>
Internal I/O Connectors	<p>x USB connectors support additional 4 USB 2.0 ports</p> <p>2 1 x High Definition front panel audio connector</p> <p>1 x S/PDIF Out connector</p> <p>1 x System Panel</p> <p>1 x Internal Speaker connector</p> <p>1 x CPU Fan connector</p> <p>1 x chassis Fan connector</p> <p>24-pin EATX power connector</p> <p>4-pin ATX 12V Power connector</p> <p>x IDE connector</p> <p>1 x SATA connectors</p> <p>4</p>
BIOS	<p>8 Mb Flash ROM AMI BIOS, PnP, DMI2.0, WfM2.0, ACPI2.0, SMBIOS 2.5</p>
Accessories	<p>User's manual</p> <p>x I/O Shield</p> <p>1 x UltraDMA 133/100/66 cable</p> <p>1 x SATA cable</p> <p>2</p>
Support CD	<p>Drivers</p> <p>ASUS Update</p> <p>ASUS PC Probe II</p> <p>Anti-virus software (OEM version)</p>
Form Factor	<p>uATX Form Factor</p> <p>9.6 inch x 8.5 inch 24.4 cm x 21.6 cm )</p>