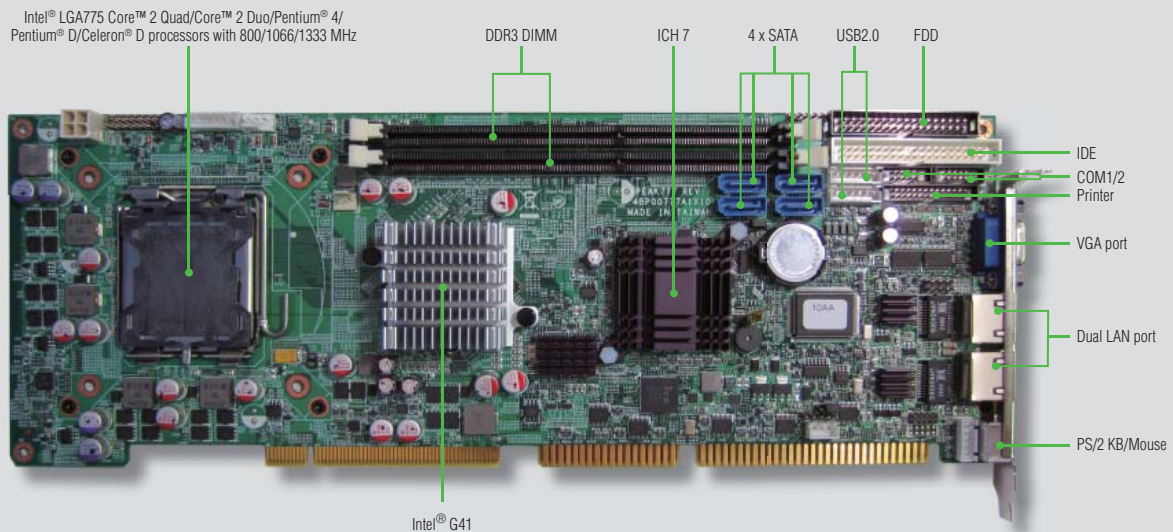


# PEAK 777VL2

Intel® 45nm/65nm Core™ 2 Quad/Duo LGA775 with  
2 x PCI Express Gigabit LAN/SATA/VGA/USB2.0



## Main Features

- Single Socket LGA775, Support Intel® 45nm/65nm Core™ 2 Duo/  
Core™ 2 Quad with 800/1066/1333 MHz FSB
- Intel® G41 and ICH7/ICH7R
- 2 x DIMM, Support DDR3 Memory up to 4GB
- 2 x Intel® 82574L PCI Express Gigabit Ethernet LANs
- 4 x SATA, 8 x USB 2.0, 2 x COM Ports

## Product Overview

PEAK 777VL2 is the PICMG 1.0 full-size Single Board Computer (SBC), which support Intel® 45nm Core™ 2 Duo/Quad technology. Featuring Intel® G41 and ICH7 chipsets, the PEAK 777VL2 support socket LGA775 of Intel Core™ 2 Quad/Core™ 2 Duo/Pentium® 4/Pentium® D/Celeron® D processor with 800/1066/1333MHz FSB.

The Intel® G41 supports dual channel non-ECC DDR3 memory up to 4GB maximum with two DIMM slots and an integrated graphics controller. The South Bridge ICH7 manages SATA HDD ports, and parallel. Furthermore, it supports other versatile I/O ports such as two serial ports, six USB ports and two PCI Express Gigabit LAN ports.

## Specifications

### CPU Support

- Supports Intel® LGA775 Core™ 2 Quad/Core™ 2 Duo/Pentium® 4/Pentium® D/  
Celeron® D processors
- Intel® Embedded Processors List (Intel® Longevity CPU)  
Intel® Core™ 2 Quad Processor QP400  
Intel® Core™ 2 Duo Processor E7400 & E5300 & E6400 & E4300 & E2160  
Intel® Pentium® 4 Processor 651 & 551 & 531  
Intel® Celeron® D Processor 352 & 341  
Intel® Celeron® Processor 440
- 533/800/1066 MHz System Bus

### Main Memory

- 2 x DIMM, support Dual channel SDRAM DDR3  
memory up to 4GB, FSB 1066/800MHz  
*Note: Maximum 4GB. Actual memory size is dynamic based on the OS  
I/O resource allocation*

### Chipset

- Intel® G41 Graphics Memory Controller Hub (GMCH)
- Intel® ICH7/ICH7R I/O Controller Hub

### BIOS

- Award System BIOS
- Plug & Play support
- 8M-bit flash ROM

### On-board LAN

- 2 x Intel® 82574L PCI Express Gigabit Ethernet LAN
- 2 x RJ45 with LED
- Supports Boot From LAN (PXE)
- Supports Wake on LAN (When 5Vsb power available, and for LAN 2 only)

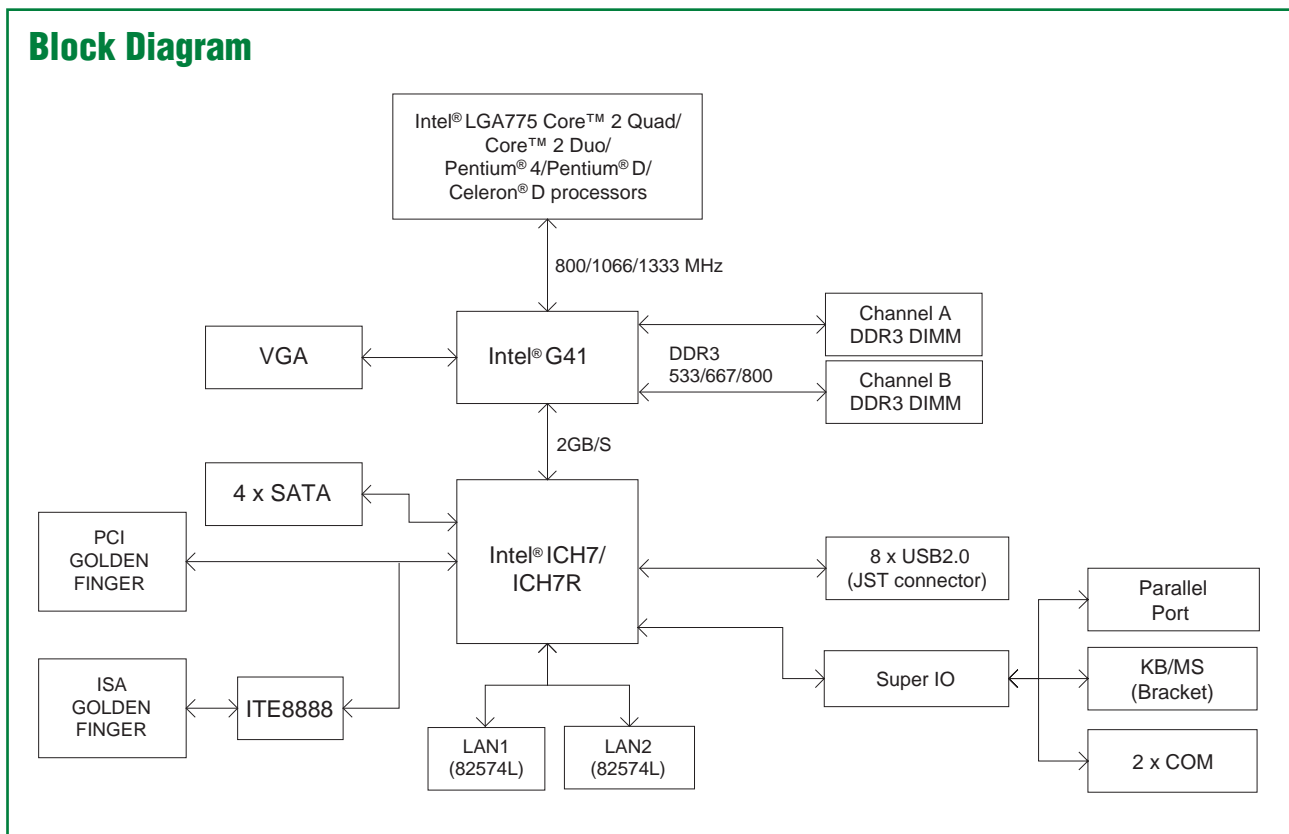
### Display

- Intel® G41 GMCH Integrated
- CRT: 1 x DB15 VGA connector

### I/O Interface

- USB 2.0: 6 ports, 2 ports through I/O bracket, 4 ports through 1x6 JST
- Serial port: 2 ports, with 2x5 box header(2.0mm) , supports RS232 only
- Parallel port: 1 port, with 2x13 box-header(2.0mm)
- PS2: 1 x 6-pin JST connector(2.0mm) for KB/Mouse
- Fan: 4-pin wafer for CPU; 3-pin wafer for System; 3-pin wafer for MCH
- 2-pin header for SMB; 2-pin header for reset; 2-pin header for power on switch
- 2-pin header for power LED; 2-pin header for HDD LED
- I/O on bracket  
1 x DB15 VGA connector  
2 x RJ45 GbE port  
1 x PS2

## Block Diagram



### Storage

- SATA: 4 ports

### Watchdog Timer

- Watchdog timeout can be programmable by Software from 1 second to 255 seconds
- Tolerance 15% under room temperature 25°C

### On-board RTC

- On-chip RTC with battery backup
- 1 x External Li Battery
- Torrance less than 2sec (24 hours) under 25°C

### ISA Support

- Through PCI to ISA Interface (ITE 8888)
- No ISA Master Devices but ISA DMA Devices
- Maximize ISA Slot support up to 3

### System Monitor

- 4 voltage (For +3.3V, +5V, +12V, Vcore)
- 3 Temperatures (CPU, two external Temperature Sensor)
- 3 FANs speed (CPU, System and MCH FANs)

### Power Input

- Power source from backplane through PCI/ISA Golden Finger
- Supports both AT or ATX Power Supplies (Automatically, BIOS default :AT Mode)
- When change to ATX, the BIOS default setting is as follow:  
POWER -SUPPLY TYPE--> [ATX]  
AUTO PWR-FAILURE RESUME -->[ON]
- +3.3V is Converted from +5V and not directly from Backplane or Power Supply
- +5Vsb (Standby power) is connected from Backplane through 3pins Connectors
- 4 Pins +12V Power Input Connector

### Dimensions

- 338.58mm (L) x 122mm (W) (13.3" x 4.8")

### Environment

- Board level operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90% (Non-condensing)  
Non-operating 5% to 95%, non-condensing

### Certifications

- CE approval
- FCC Class A

## Ordering Information

- **PEAK 777VL (P/N: 10P0777VL00X0)**  
PICMG 1.0 Full-Size SBC, Intel® G41 Chipset, Intel® LGA775 Core™ 2 Quad/ Core™ 2 Duo/Celeron® D processors with 800/1066/1333MHz, Max. 4GB DDR3, DIMM, VGA integrated, 1xGbE, 4xSATA
- **PEAK 777VL2 (P/N: 10P0777VL01X0)**  
PICMG 1.0 Full-Size SBC, Intel® G41 Chipset, Intel® LGA775 Core™ 2 Quad/ Core™ 2 Duo/Pentium® 4/Pentium® D/Celeron® D processors with 800/1066/1333MHz, Max. 4GB DDR3 DIMM, VGA integrated , 2 x GbE, 4 x SATA Ports