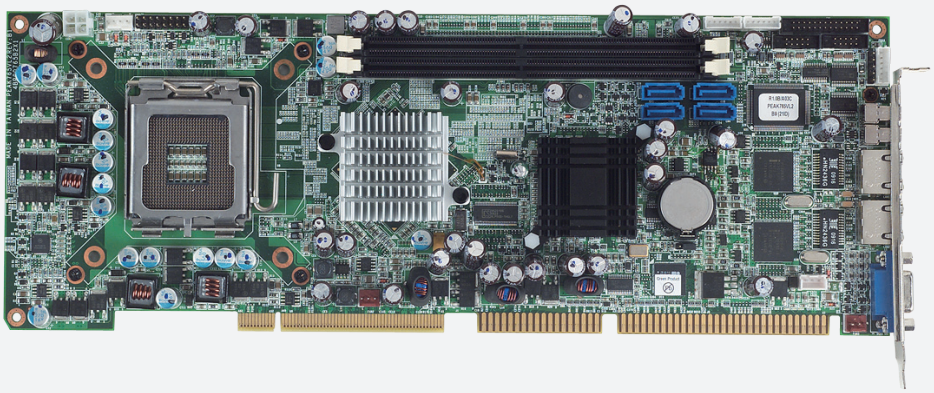
PEAK 777VL2

PICMG 1.0 Intel® Core™ 2 Quad/Duo LGA775 with
Intel® G41/ICH7 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 USB2.0, 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/Celeron® 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/Celeron® processors
- Intel® Embedded Processors List (Intel® Longevity CPU)
  Intel® Core™ 2 Quad Processor Q9400
  Intel® Core™ 2 Duo Processor E8400 & E7400 & E1500
  Intel® Celeron® 440 Processor
- 800/1066/1333 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, LAN1 & LAN2)

Display

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

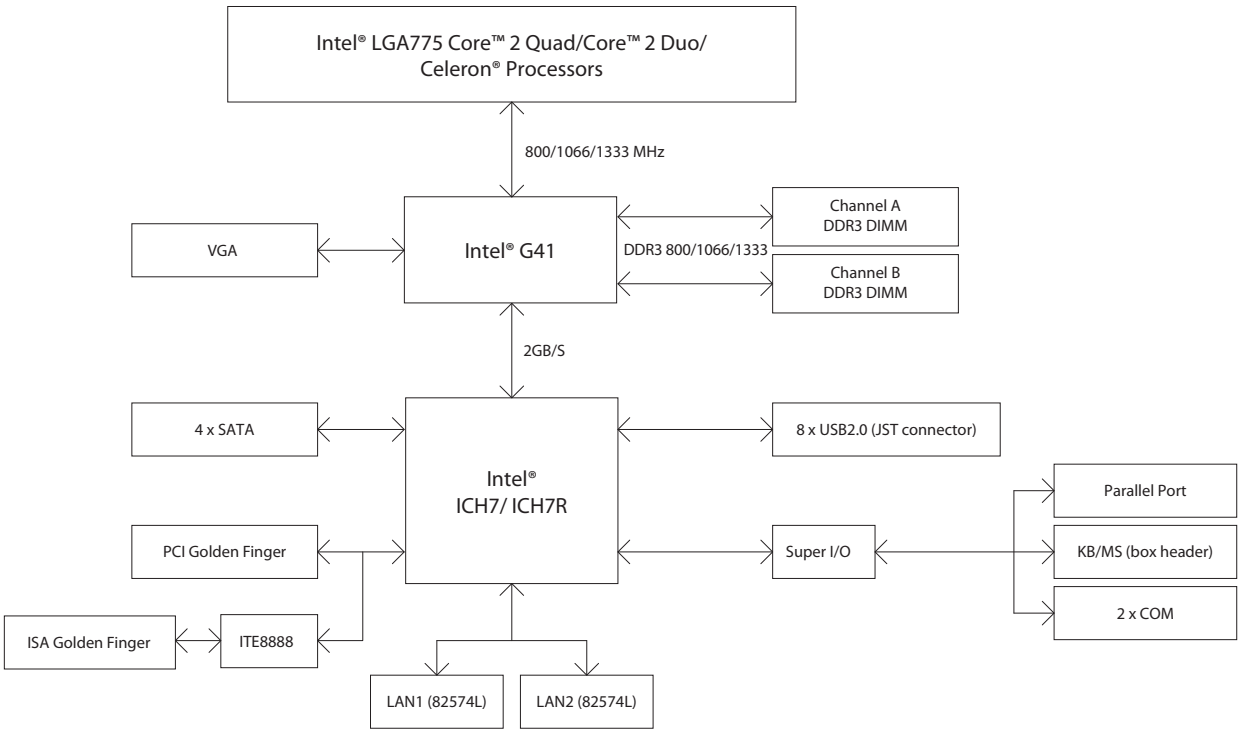
I/O Interface

- USB2.0: 6 ports, through 1 x 6 JST
- Serial port: 2 ports, with 2 x 5 box header (2.0mm), supports RS232 only
- Parallel port: 1 port, with 2 x 13 box-header (2.0mm)
- PS2: 1 x 6-pin JST connector (2.0mm) for KB/Mouse
- Fan: 4pin wafer for CPU; 3pin wafer for System; 3pin wafer for MCH
- 2pin header for SMB; 2pin header for reset; 2pin header for power on switch
- 2pin header for power LED; 2pin header for HDD LED
- I/O on bracket
  1 x DB15 VGA connector
  2 x RJ45 GbE port
  1 x PS2
  1 x IDE with 40-pin header
  1 x Floppy with 34-pin header

Storage

- SATA: 4 ports

Block Diagram



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
- 5 voltage (For +1.1V, +1.5V, +3.3V, +5V, +12V, Vcore)
- 3 Temperatures (CPU, two external Temperature Sensor)
- 2 FANs speed (For CPU and System)

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

We reserve the right to change specifications and product descriptions at any time without prior notice.