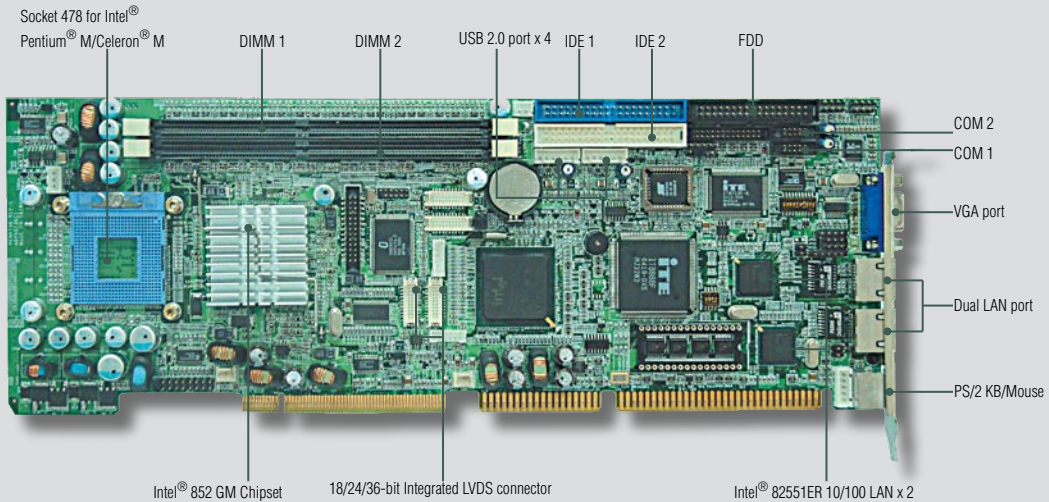


PEAK 736VL2



Full-Size PICMG Socket 478 for Intel® Pentium®M/Celeron® M with VGA and Dual LAN



Main Features

- **Socket 478 for Intel® Pentium® M/Celeron® M Processors up to 2.0 GHz and Higher with 400 MHz FSB**
- **Intel® 852GM/ICH4 Chipsets**
- **184-pin DIMM x 2, Supports DDR 200/266 SDRAM memory up to 1 GB**
- **Integrated VGA, Dual Independent Display, Max. 36-bit Dual LVDS Displays**
- **Intel® 82551ER 10/100 LAN x 2**
- **USB 2.0 port x 4**

Product Overview

The PEAK 736VL2 Series is a full-size SBC featuring socket 478 Intel Pentium M and Celeron M processors with 400 MHz FSB, various frequencies and L2 caches. The product incorporates an Intel 852GME chipset that supports unbuffered non-ECC DDR 200/266 MHz memory up to 2 GB maximum, an integrated graphic controller with shared 64 MB memory, LVDS LCD and dual display support. The South Bridge ICH4 chipset offers Ultra ATA 100, parallel and floppy ports, and other versatile I/O ports such as two serial ports, four USB ports, dual LAN ports, an audio interface, and others.

The PEAK 736VL2 Series offers a range of processor choices and versatile I/O ports and is a powerful solution for demanding industrial applications.

Specifications

CPU Support

- Single 478 uFCPGA/479 uFCBGA socket
- Supports Intel® Pentium® M: 1 or 2 MB L2 Cache, 400 MHz FSB, speeds up to 1.8 GHz
- Supports Intel® Celeron® M: 512 KB or 1 MB L2 Cache, 400 MHz FSB, speeds up to 1.5 GHz

Main Memory

- 184-pin DDR DIMM x 2
- Supports unbuffered non-ECC DDR 200/266 memory up to 1 GB

Chipset

- Intel® 852GM
- Intel® 82801DB I/O Controller Hub (ICH4) x 1

BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management and Advanced Configuration & Power Interface support
- 4 Mbit flash ROM

On-board LAN

- Intel® 82551ER 10/100 Fast Ethernet x 1
- Optional Intel® 82551ER 10/100 Fast Ethernet x 1 (for Peak 736VL2 only)
- RJ45 with LED connector x 1

Display

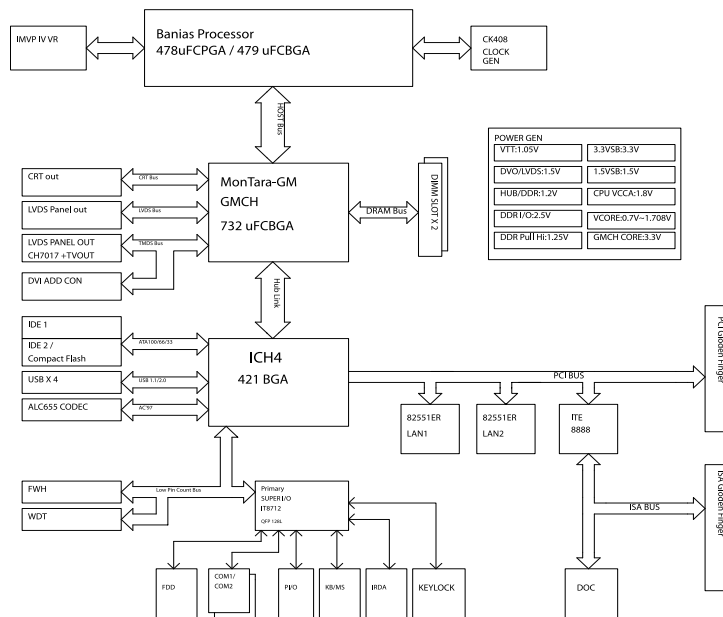
- Intel® 852GM integrated dynamic video shared memory, 64 MB max adjusted by OS

- D-sub 15-pin VGA port x 1
- Resolution: Up to 1600 x 1200 for CRT or up to 1280 x 1024 for TFT
- Internal LVDS: Supports 18/24-bit single pixel or 18-bit dual pixel LVDS panels (resolution up to 1280 x 1024)
- Dual display: Simultaneous scan- CRT + LVDS LCD, Dual View- CRT+ LVDS LCD
- CCFL connector for LCD panel backlight: Provides +12 V or +5 V for backlight inverter

I/O Interface

- Serial port: 10-pin box header x 2, (optional COM2 RS-232/422/485 by switch for Peak 736VL2 only)
- USB 2.0 port x 4 through two 6-pin box headers
- HDD: Ultra ATA 100/66/33 support, 40-pin connector x 2
- Disk on Module: 2-pin power connector for DOM
- Parallel port: 26-pin connector x 1 / Floppy: 34-pin connector x 1
- PS/2 Keyboard/ mouse: 6-pin Mini DIN Connector x 1. 5-pin connector x 1 for external KB/ Mouse
- Digital I/O port: 4 In and 4 Out with TTL level interface
- On-board buzzer x 1 / IrDA Header x 1
- On-board 2-pin header for reset
- 5 pin for key lock, 2-pin for power LED, 2-pin for HDD Power LED
- 3-pin fan JST connector x 1
- I/O On Bracket
- VGA DB-15 connector x 1
- RJ45 Gigabit Ethernet LAN port x 2

Block Diagram



- Mini-DIN for Keyboard/Mouse x 1
- USB 2.0 ports x 4

Watchdog Timer

- 1 ~ 128 second time-out intervals

On-board RTC

- On-chip RTC with battery back up
- External Li-Ion battery x 1

Disk On Module

- HDD: Ultra ATA 100/66/33 support, 40-pin connector x 2
- Disk on Module: 2-pin power connector for DOM

ISA Support

- ITE 8888F x 1 PCI to ISA Bridge
- Provides 64 mA to support max. 20 ISA slots on the backplane

System Monitor

- System monitor controller derived from IT8712
- 6 voltage (For +3.3 V, +5 V, +12 V, Vcore, +5 V Standby, and +3.3 V Standby)
- 2 fan speed (For CPU and system)
- 2 temperature (One for CPU, one for system)

Power Input

- Power source from backplane through PCI/ISA golden finger
- Supports both AT or ATX power supplies
- +3.3 V is converted from +5 V and not directly from backplane or power supply
- +5 Vsb (standby power) is connected from backplane through 3-pin connector
- 4-pin +12 V Power Input Connector

Power Requirements

- CPU/Memory: 1.7 GHz/1 GB
- 5 V: 5.25 A
- 12 V: 0.15 A

- 3.3 V: 0 A
- 5 Vsb: 0.05 A

Dimensions

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

Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering information

- **PEAK 736VL (P/N: 1P0736VL00)**
Full-Size Socket 478 Intel Pentium M CPU card with 1 x LAN (Intel 82551ER)
- **PEAK 736VL-C65 (P/N: 1P0736VL02)**
Full-Size On-board Intel Celeron 600 MHz CPU card with 1 x LAN
- **PEAK 736VL2 (P/N: 1P0736VL01)**
Full-Size Socket 478 Intel Pentium M CPU card with 2 x LAN (Intel 82551ER), CF socket, Audio, and RS422/485
- **PEAK 736VL(LF) (P/N: 1P0736VL00X0)** RoHS Compliant
Full-Size Socket 478 Intel Pentium M CPU card with 1 x LAN (Intel 82551ER)
- **PEAK 736VL(LF)-C65 (P/N: 1P0736VL01X0)** RoHS Compliant
Full-Size On-board Intel Celeron 600 MHz CPU card with 1 x LAN