

## Main Features

- Supports Intel® Pentium® 4/4-M/Celeron® Processors with 400/533 MHz FSB
- Supports 2 x 184-pin DIMM DDR 266/333 Memory up to 2 GB
- Intel® 82845GV Chipset
- Supports 1 x Intel® 82562EM 10/100 LAN and 1 x Intel® 82541 Gigabit LAN
- Standard ATX Form Factor with 4 x PCI Slots, 3 x ISA Slots
- 6 x USB 2.0, 4 x COM Ports

## Product Overview

The NEX 716VL2G is an industrial ATX board that supports Intel® Pentium® 4, Pentium® 4-M, or Celeron® processors with 400/533 MHz FSB up to for a range of frequencies and L2 cache. The NEX 716VL2G incorporates Intel® 82845GV and 82801DB (ICH4) chipset. The Intel® 82845GV supports un-buffered non-ECC DDR 266/333 memory up to 2 GB and an integrated graphic controller with 64 MB VGA shared memory.

The South Bridge ICH4 is a low power consumption chipset, which support three ISA slots, four PCI slots, a parallel port, a floppy port, and two 40-pin IDE connectors. The other supported I/O ports include four serial ports, six USB ports, one 10/100 LAN and one Gigabit LAN. The NEX 716VL2G Series offer a wide range of processor flexibility and rich I/O ports to fit in various applications.

## Specifications

### CPU Support

- Intel® Pentium® 4 processor up to 3.06 GHz with 512 KB L2 cache and 400/533 MHz FSB, Hyper-Threading technology and Intel® Net Burst Micro architecture support
- Intel® Pentium® 4-M Processor up to 2.6 GHz with 512 KB L2 cache, 400 MHz FSB and Intel® Net Burst Micro architecture support
- Intel® Celeron® processor up to 2.8 GHz with 128 KB L2 cache and 400 MHz FSB

### Main Memory

- Two 184-pin DIMM sockets support up to 2 GB unbuffered non-ECC DDR 266/333 SDRAM
- Does not support double-sided x 16 DDR Chip
- Does not support stacking type memory

### Chipset

- Intel® 82845GV chipset
- Intel® 82801DB (ICH4)

### BIOS

- Award system BIOS
- Plug & Play support
- 4 Mbit flash ROM
- APM (Advanced Power Management) support
- ACPI (Advanced configuration & Power Interface) support

### On-board LAN

- Intel® PRO/100 Network Connection (Intel LAN S82551 ER) x 2
- Intel® 82562 EM 10/100 Fast Ethernet Controller x 1
- Intel® 82541GI Gigabit Ethernet Controller x 1

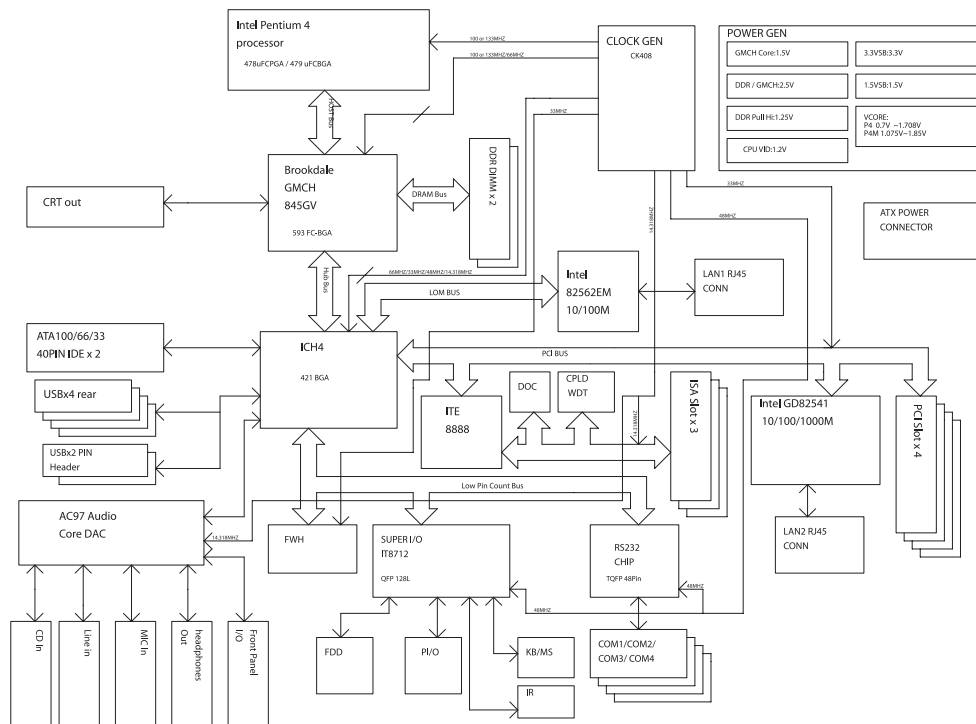
### Display

- Intel® 82845GV chipset with integrated graphics controller
- 64 MB VGA shared memory
- 15-pin CRT connector x 1

### I/O Interface

- Serial port: SIO x 4 (COM2 with 422/485 optional), 9-pin header x 3, 9-pin D-Sub connector x 1
- Parallel port: D-Sub 25-pin connector x 1, EPP/ECP support
- LAN: 10/100 Fast Ethernet LAN x 1 and GbE LAN x 1
- IDE HDD: Dual Ultra ATA 33/66/100 channels, 40-pin connector x 2, supports up to 4 HDDs (4 EIDE device support)
- Floppy: 34-pin connector x 1
- PS/2 Keyboard/Mouse: Mini-Din connector x 2
- GPIO (4-in, 4-out)
- Reset SW: on-board 2-pin header
- SM bus: on-board 2-pin header
- USB 2.0 x 6
- 5-pin IrDA pin header x 1

## Block Diagram



### On-board RTC

- On-chip RTC with external Lithium battery back up
- System Monitor
- Derived from ITE8712 super I/O
- 8 voltage (for +1.5 V, +3.3 V, +5 V, -5 V, +12 V, Vcore, +3.3 Vsb and +5 V stand-by)
- 3 fan speed (1 for CPU and 2 for system)
- 2 temperature (for CPU and external system)

### Power Requirements

- Measure with Intel® Pentium® 4 2.66 GHz
- +3.3 V: 0.6 A
- +5 V: 1.5 A
- +12 V: 5 A
- +5 Vsb: 0.1 A
- Measure with Intel® Pentium® 4-M 2.4 GHz
- +3.3 V: 1 A
- +5 V: 2 A
- +12 V: 3.5 A
- +5 Vsb: 0.05 A

### 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

- **NEX 716VL2G (LF) (P/N: 10G0716VL00X0)** RoHS Compliant Intel® Pentium® 4/4-M/Celeron® Processor w/Dual LAN (10/100 LAN + GbE) / 6 x USB 2.0 / 4 x COM / Audio / ISA / PCI
- **NEX 716VL(LF) (P/N: 10G0716VL02X0)** RoHS Compliant Intel® Pentium® 4/4-M/Celeron® Processor w/LAN / 6 x USB 2.0 / 2 x COM / Audio / ISA / PCI