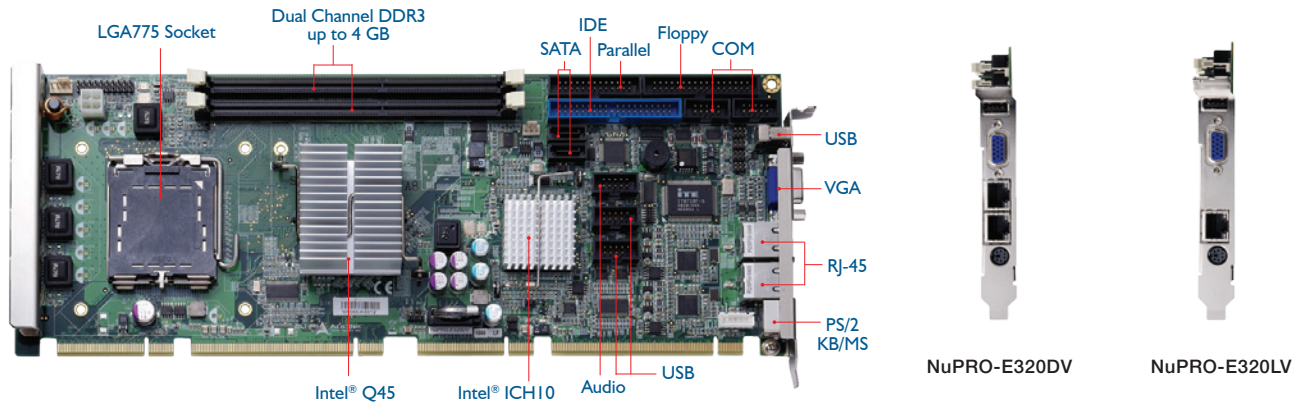


# NuPRO-E320

PICMG® 1.3 Full-Size LGA775 Intel® Core™ 2 Quad/Duo Processor-based SHB



## Features

- Intel® Q45 + ICH10 chipset supports up to 1333 MHz FSB LGA775 Intel® Core™ 2 Quad/Duo processor
- Dual-Channel DDR3 800/1066 MHz, up to 4 GB
- One PCI Express® x16 and four PCI Express® x1 (or one x4) link to backplane
- Dual Gigabit Ethernet via PCI Express® x1 bus

## Specifications

### Processor & System

CPU	Processor & System
Intel® Core™ 2 Quad Q9400, 2.66 GHz, 1333 MHz FSB, 6 MB L2 Cache, 45nm, 95W TDP, LGA775	Intel® Core™ 2 Quad Q9400, 2.66 GHz, 1333 MHz FSB, 6 MB L2 Cache, 45nm, 95W TDP, LGA775
Intel® Core™ 2 Duo E8400, 3.0 GHz, 1333 MHz FSB, 6 MB L2 Cache, 45nm, 65W TDP, LGA775	Intel® Core™ 2 Duo E8400, 3.0 GHz, 1333 MHz FSB, 6 MB L2 Cache, 45nm, 65W TDP, LGA775
Intel® Core™ 2 Duo E7400, 2.8 GHz, 1066 MHz FSB, 3 MB L2 Cache, 45nm, 65W TDP, LGA775	Intel® Core™ 2 Duo E7400, 2.8 GHz, 1066 MHz FSB, 3 MB L2 Cache, 45nm, 65W TDP, LGA775
Intel® Pentium® Dual Core E6500, 2.93 GHz, 1066 MHz FSB, 2 MB L2 Cache, 45nm, 65W TDP, LGA775	Intel® Pentium® Dual Core E6500, 2.93 GHz, 1066 MHz FSB, 2 MB L2 Cache, 45nm, 65W TDP, LGA775
Intel® Core™ 2 Duo E6400, 2.13 GHz, 1066 MHz FSB, 2 MB L2 Cache, 65nm, 65W TDP, LGA775	Intel® Core™ 2 Duo E6400, 2.13 GHz, 1066 MHz FSB, 2 MB L2 Cache, 65nm, 65W TDP, LGA775
Intel® Pentium® E5300, 2.6 GHz, 800 MHz FSB, 2 MB L2 Cache, 45nm, 65W TDP, LGA775 (2C)	Intel® Pentium® E5300, 2.6 GHz, 800 MHz FSB, 2 MB L2 Cache, 45nm, 65W TDP, LGA775 (2C)
Intel® Core™ 2 Duo E4300, 1.8 GHz, 800 MHz FSB, 2 MB L2 Cache, 65nm, 65W TDP, LGA775	Intel® Core™ 2 Duo E4300, 1.8 GHz, 800 MHz FSB, 2 MB L2 Cache, 65nm, 65W TDP, LGA775
Intel® Celeron® E3400, 2.6 GHz, 800 MHz FSB, 1 MB L2 Cache, 45nm, 65W TDP, LGA775 (2C)	Intel® Celeron® E3400, 2.6 GHz, 800 MHz FSB, 1 MB L2 Cache, 45nm, 65W TDP, LGA775 (2C)
Intel® Pentium® E2160, 1.8 GHz, 800 MHz FSB, 1 MB L2 Cache, 65nm, 65W TDP, LGA775 (2C)	Intel® Pentium® E2160, 1.8 GHz, 800 MHz FSB, 1 MB L2 Cache, 65nm, 65W TDP, LGA775 (2C)
Intel® Celeron® E1500, 2.2 GHz, 800 MHz FSB, 512 KB L2 Cache, 65nm, 65W TDP, LGA775 (2C)	Intel® Celeron® E1500, 2.2 GHz, 800 MHz FSB, 512 KB L2 Cache, 65nm, 65W TDP, LGA775 (2C)
Intel® Celeron® 440, 2.0 GHz, 800 MHz FSB, 512 KB L2 Cache, 65nm, 35W TDP, LGA775 (1C)	Intel® Celeron® 440, 2.0 GHz, 800 MHz FSB, 512 KB L2 Cache, 65nm, 35W TDP, LGA775 (1C)
Chipset	Intel® Q45 + ICH10
Memory	Dual-Channel DDR3 800/1066 MHz, up to 4 GB
TPM	Infineon® SLB9635 TT1.2 (optional)
BIOS	AMI BIOS 16 Mb flash memory
Watchdog Timer	1-255 sec. or min. software programmable and can generate system reset
Hardware Monitor	CPU/System temp. fan speed, onboard DC voltages
Operating Systems	Windows® XP, Vista, 7 32/64-bit Fedora™ 8, Red Hat Enterprise Linux 5

## I/O Interfaces

Serial ATA	4x SATA 3 Gb/s ports (2x onboard headers, 2x backplane)
USB	9x USB 2.0 ports (1x faceplate, 4x onboard pin headers, and 4x backplane)
KB/MS	1x PS/2 keyboard/mouse
Floppy	1x Floppy
Parallel Port	1x LPT
Serial Port	1x RS-232, 1x RS-232/422/485/485+

## Audio

**Audio Codec Interface** Realtek ALC262 support by DB-Audio2 daughter board  
Pin header for High Definition Audio interface

## Display

**Graphics** Intel® Graphics Media Accelerator 4500  
**VGA** Up to 2048 x 1536 @ 75 Hz (QXGA)

## Ethernet

**Controller** Dual Intel® 82574L PCIe® network controllers (optional)  
10/100/1000Base-T dual-Gigabit Ethernet  
**Interface** PCIe® x1 bus  
**Wake On LAN** Support on LAN1

## Mechanical and Environmental

**Form Factor** Full-Size PICMG® 1.3 System Host Board  
**Dimensions** 338 mm x 126 mm (L x W)  
**Operating Temp.** 0°C to 60°C  
**Storage Temp.** -20°C to 80°C  
**Certifications** CE, FCC Class A  
**Relative Humidity** 10% to 90%, non-condensing

## Ordering Information

Model Number	Description/Configuration
NuPRO-E320DV	PICMG® 1.3 Full-Size LGA775 Intel® Core™ 2 Quad/Duo Processor-based SHB with dual-channel DDR3, TPM, dual GbE, SATA II
NuPRO-E320LV	PICMG® 1.3 Full-Size LGA775 Intel® Core™ 2 Quad/Duo Processor-based SHB with dual-channel DDR3, GbE, SATA II

Note: CPU, Memory module and Cooler kit are not included.

## Optional Accessories

Model Number	Description/Configuration
LGA775 1U CPU Cooler	LGA775 1U Thermal Module
LGA775 3U CPU Cooler	LGA775 3U Thermal Module
Backplate	Backplate for 3U CPU cooler
DB-Audio2	High Definition audio daughter board with mic-in/line- in/line-out

## Packing List

NuPRO-E320	1x COM+Parallel port cables with bracket
1x Y-cable for PS/2 keyboard/mouse	2x SATA data cables
1x UltraATA 100 IDE cable	1x dual-plug SATA power cable
1x Floppy cable	Driver DVD
1x USB 2.0 cable with bracket	User's manual
1x COM port cable with bracket	