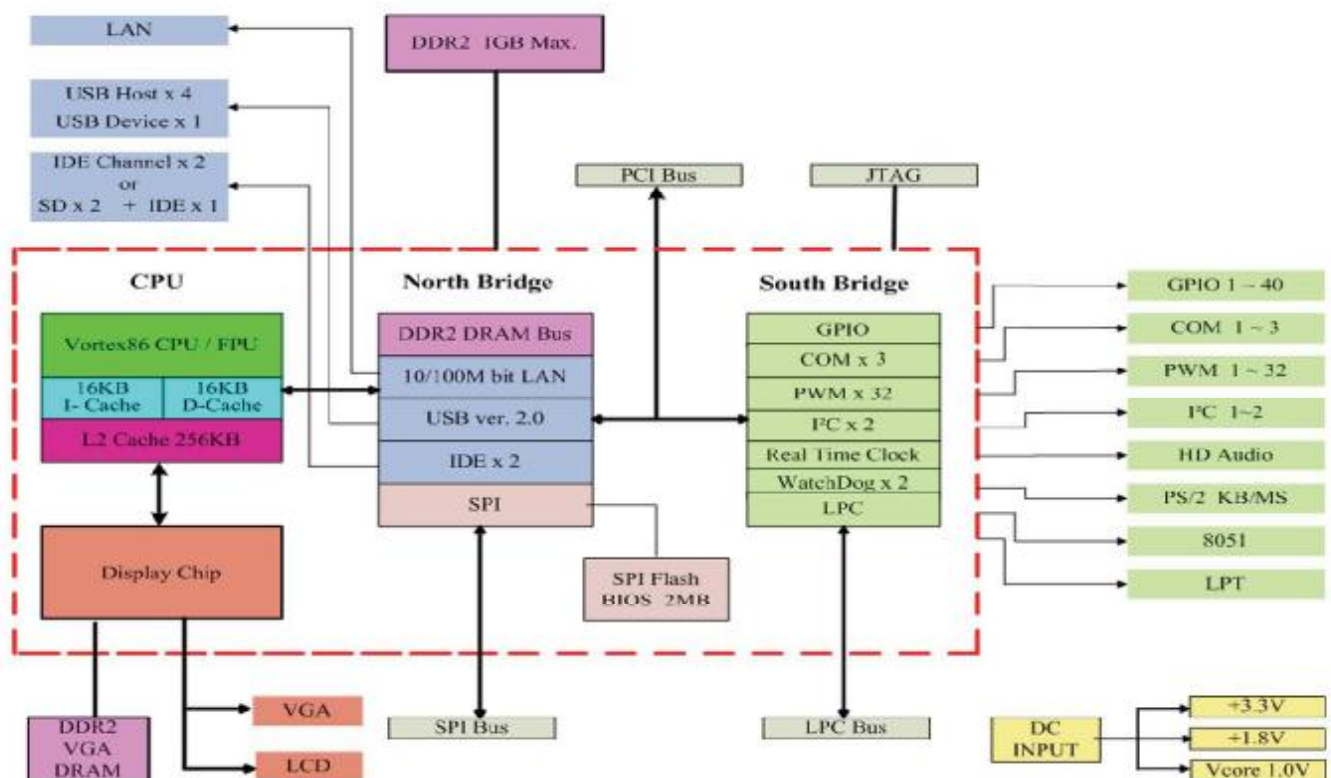


The PMX-1000 is a high performance and fully static 32-bit X86 processor with the compatibility of Windows based, Linux and most popular 32-bit RTOS. It also integrates 32KB write through 4-way L1 cache, 256KB write through/write back 4-way L2 cache, GPU, Audio, PCI rev. 2.1 32-bit bus interface at 33 MHz, DDR2, ROM controller, IPC (Internal Peripheral Controllers with DMA and interrupt timer/counter

included). Fast Ethernet, FIFO UART, USB2.0 Host and IDE controller within a single 720-pin BGA package to form a system-on-a-chip (SOC). It provides an ideal solution for the embedded system and communications products (such as thin client, NAT router, home gateway, access point, Netbook and tablet PC) to bring about desired performance.

Features

- x86 Processor Core
- Floating point unit support
- Embedded I / D Separated L1 Cache
- Embedded L2 Cache
- DDRII Control Interface
- IDE Controller
- LPC (Low Pin Count) Bus Interface
- GPU Control Unit
- MAC Controller x 1
- PCI Control Interface
- HDA Controller
- DMA Controller
- Real Time Clock
- FIFO UART Port x 3
- Parallel Port x 1
- General Programmable I/O
- USB 2.0 Host Support
- PS / 2 Keyboard and Mouse Interface Support
- Speaker out
- Embedded 2MB Flash
- I²C bus x 2
- Servo Control interface support
- General Shift interface support
- JTAG Interface supported for S.W. debugging
- Operating temperature



◆ ATOM Z510, PMX1000 Spec 비교

| | Z510 | PMX1000 | Remark |
|---------------------------------|-----------------------------------|-----------------------------------|---|
| CPU Frequency | 1.1Ghz | 1Ghz | ATOM vs DMP CPU ▶ Real Single Chip Solution (CPU+Graphic+Chipset+Bios) ▶ Easy Development & Cost effective ▶ Wide Range Temperature (-40°C~+80°C) ▶ Low Power Consumption (Single Voltage : 5V@1.06A) ▶ Fanless ▶ 6-Layer PCB Layout |
| FPU | Yes | Yes | |
| L1 Cache | I-Cache 32Kb D-Cache 24Kb | I-Cache 16Kb D-Cache 16Kb | |
| L2 Cache | 512 Kb | 256Kb | |
| Instruction Set | MMX, SSE, SSE2, SSE3 | MMX | |
| | Chipset US15W | Inside | |
| Memory | DDR2 4Gb (Max) | DDR 1Gb (Max) | |
| FSB | 533/400 Mhz | 400 Mhz | |
| EIDE | 1 (disk 2) | 1 (disk 2) | |
| SD port | 2 | 1 | |
| USB 2.0 | 8 | 4 | |
| Ethernet | No | Yes (10/100Mbps) | |
| Audio | HD Audio | HD Audio | |
| GPIO | 14 | 40 | |
| PWM | No | 32 | |
| WatchDog | No | 2 | |
| I2C | No | 2 | |
| COM | unknown | 3 | |
| Parallel | unknown | 1 | |
| PCI | unknown | Yes | |
| PCI-e | Yes | No | |
| | GMA500 | Inside | |
| Video Interface | 18 or 24 bit LVDS | Analog RGB, 18bit TTL | |
| Display Resolution (VGA Output) | 1280x1024 | 1400x1050 | |
| Graphics Engine | 2D, 3D | 2D | |
| HW Video Decode | H.264, MPEG2, MPEG4, VC1 | No | |
| OS | Windows XP, Linux(Ubuntu 8.04) | Windows XP, Linux(Ubuntu 8.04) | |