

WP3200 Home Gateway Processor Product Brief

?? Features

- ?? WP3200 integrated a high performance 32-bit processor core. The processor contains 4K Instruction cache, 2K Data cache and MMU with TLB; its operation frequency is user selectable 100/75MHz. The processor is support Little Endian Mode and EJTAG debug function.
- ?? Supports 16M/64M/128M bit SDRAM with 2/4-bank size availability, its operation frequency is the same as processor.
- ?? 2 banks of Static Memory interfaces which can support Mask ROM, Page Mode ROM, EPROM, E2PROM, SRAM and NOR Flash (linear type)
- ?? NAND Flash (block type) controller interfaces
- ?? Provide a 256-Byte hard-wired boot code that can choose booting from normal ROM, NAND Flash, UART or EJTAG debugger interface
- ?? PCMCIA-like interface to support glue-less connected to WLAN 802.11b device
- ?? Two Integrated 10/100 Ethernet MACs and one 10M PHY
- ?? There are 5 bus masters on the WP3200 including CPU, Ethernet 1, Ethernet 2, USB and Memory-to-Memory DMA
- ?? 3 24-bit up counter Timers and supports Interval timer mode and Watchdog timer modes (only Timer 3)
- ?? 2 sets of full duplex UARTs, one high speed up to 921K bps and one low speed up to 115.2K bps
- ?? USB Device Controller Interface compliance with USB specification v1.1
- ?? Provide 16 bi-directional general-purpose I/O pins (shared with other function pins)
- ?? Two internal PLLs use external 8MHz crystal or oscillator
- ?? Non-stop 32.768kHz clock to generate 1 Hz clock to provide real time clock and calendar function
- ?? 160 pins QFP Package

Figure 1 Block Diagrams

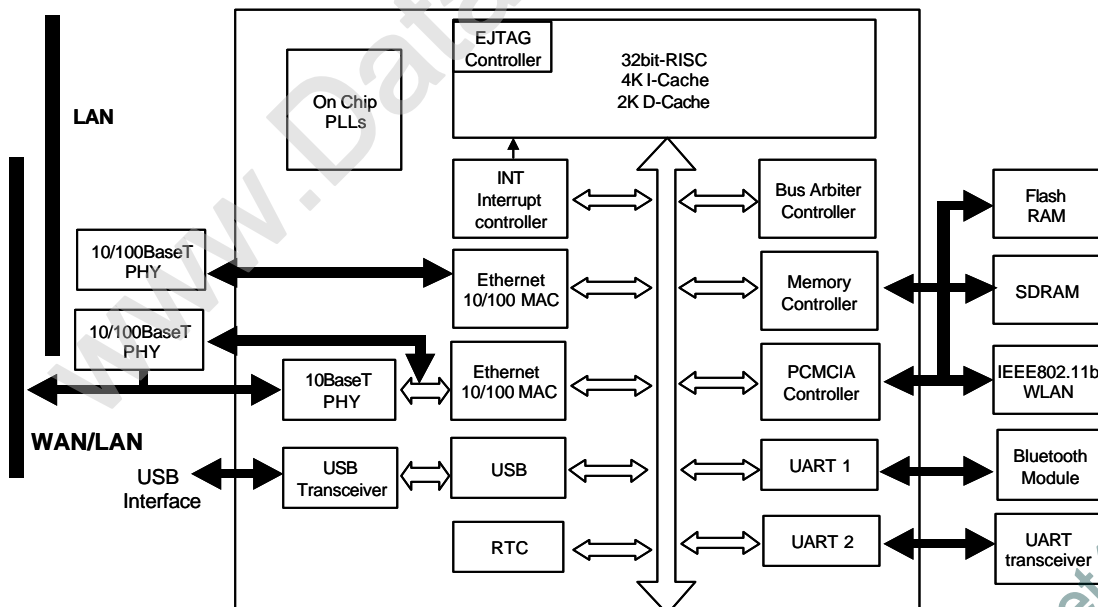
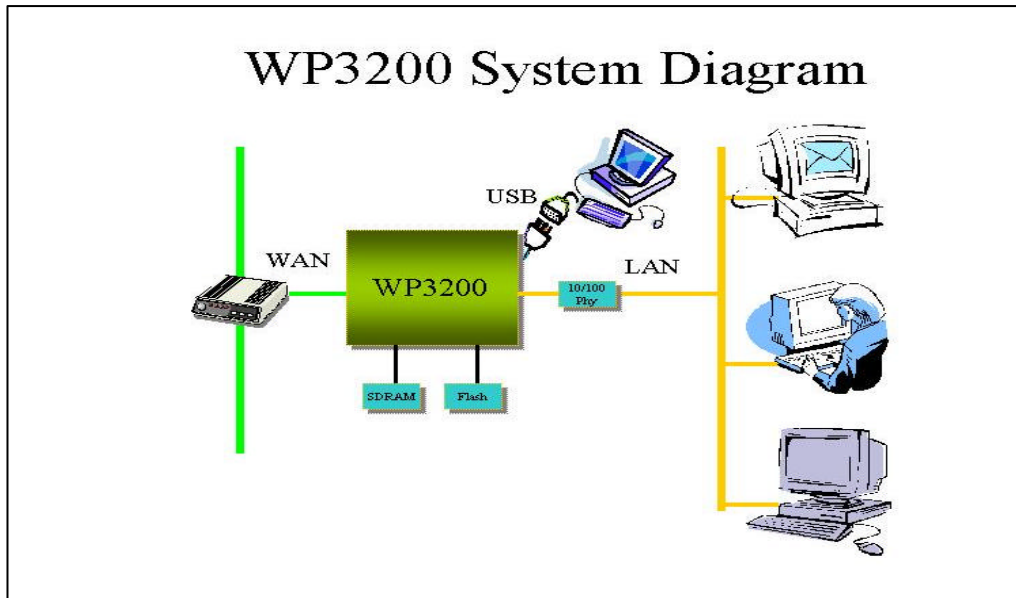


Figure 2 System Diagram



Descriptions:

The WP3200 is Home Gateway processors integrate two Ethernet MACs and one internal 10M BaseT Phy. Beside the Ethernet, WP3200 also provides USB specification v1.1 slave interface, PCMCIA like interface, which provide the connectivity to Internet and home network. The high performance processor with high-speed memory bus interface can provide high data through put on the network applications.

Software support

OS: Linux 2.4.17

Drivers: UART, USB, PCMCIA, Ethernet, and Flash boot.

Application: Firewall, NAT, httpd, DHCP and PPPoE.

Typical Application:

Residential Gateway: SOHO Routers, Gaming Consoles, Digital Modem, Set-top Box

Broadband Access: xDSL, Cable, ISDN, Phone line

Home Networking: Ethernet, Wireless LANs, Bluetooth™ Access Point, HomeRF, Printer Server

Ordering Information: WP3200 DQPB

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