





**CX84200 Home Network Processor block diagram**

## CX84200 Features

- 5 Ethernet ports, 1 MII
- Embedded RISC CPU, 75MHZ ARM7TDMI
- Embedded switch engine
  - Store-and-forward operation
  - Non-blocking, full line speed capability
  - Full-duplex (IEEE802.3x) and half-duplex flow control (Back pressure)
  - Two priorities CoS, set by port, VLAN tag, TCP/IP TOS, and customized type
  - 6 port grouping VLAN (overlappable)
  - MIB counters
  - Sharing dynamic data buffer management, embedded SSRAM
  - MAC look-up table read/write-able
  - MAC address level security
  - Bandwidth control
  - Hashing scheme: direct-map or XOR
- Embedded 10/100BaseT/TX PHY
  - DSP based design
  - 10BASE-T/100BASE-TX IEEE 802.3u Compliant
  - Digital Decision Feedback Equalizer
  - Integrated Baseline Wander Correction
  - 3 LEDs provided per port
- Flash interface (512Kx8, 512Kx16 up to 1Mx16)
- SDRAM interface (1Mx16x2 up to 4Mx16x2)
- 2 UART interface, one for the modem interface
- GPIO pins
- LAN / WAN bandwidth prioritized
- Single 25MHz crystal input for network
- 2.5/3.3V, 0.25u CMOS process, 208-pin PQFP

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