



PRODUCT OVERVIEW

The Marvell® Link Street™ family of highly integrated gateway router devices provides a superior level of functionality and performance for residential gateway applications. The Marvell Link Street 88E6208 device is an advanced single-chip gateway router device integrating a high-performance CPU for wire-speed routing, an advanced switching fabric, five integrated Fast Ethernet (FE) PHYs, a UART for debugging and modem backup, and advanced Virtual Cable Tester™ (VCT) cable diagnostics. The 88E6208 device is an ideal solution for residential gateway applications.

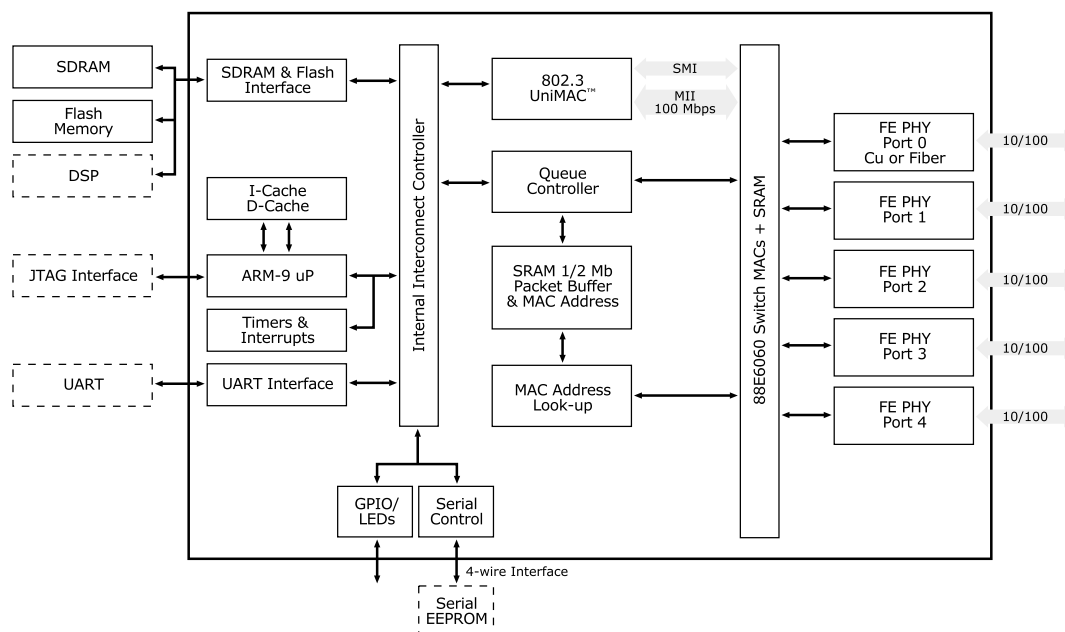


Figure 1. Link Street 88E6208 Internal Block Diagram

FEATURES

- Single-chip integration of a high-performance CPU, multi-port switch with FE PHYs, peripheral I/O ports and VCT technology
- ARM-9 CPU at 133 MHz clock frequency
- Five integrated FE PHY ports
 - Auto-MDI/MDIX crossover for 100BASE-TX and 10BASE-T ports
 - One FE PHY port can be configured for copper (100BASE-TX or 10BASE-T) or fiber (100BASE-FX) connections
- VCT technology
- UART port

BENEFITS

- Provides a low-cost and full-featured solution for Small Office/Home Office (SOHO) routers
- High-performance CPU with optimized internal caches for wire-speed routing throughput
 - Simplifies and reduces cost of networking installation and reduces costly phone calls to equipment manufacturers' support centers
 - Supports both copper and fiber connections with the integrated Marvell Alaska® digital PHY technology for market-leading network reach
- Advanced cable integrity diagnostics help customers determine location of cable opens, shorts and impedance mismatch
- Reduces costly phone calls to equipment manufacturers' support centers
- UART port can be used for console management or for WAN link backup via an external modem



FEATURES

- High-speed switch fabric
 - High-performance lookup engine with support for up to 2,048 MAC address entries with automatic learning and aging
 - Port-based VLANs supported in any combination
- CMOS low power dissipation PAVE = less than 1.2W

BENEFITS

- Provides true non-blocking switching performance
 - Supports a large number of Ethernet nodes
 - Allows suppression or addition of VLAN group membership to provide flexible management by IT managers
- Eliminates expensive heatsinks or fans and permits the use of low-cost and small enclosures

APPLICATIONS

The Link Street family of products provides industry-leading functionality for advanced gateway routers. The Link Street 88E6208 device's high integration allows OEM and ODMs to deliver strong SOHO networking features and performance at entry-level prices in a small footprint. The flexibility of the 88E6208 device comes from its configuration options and integration. The device integrates a high-performance CPU for wire-speed routing of network packets. Figure 2 shows the 88E6208 device in a residential gateway router application.

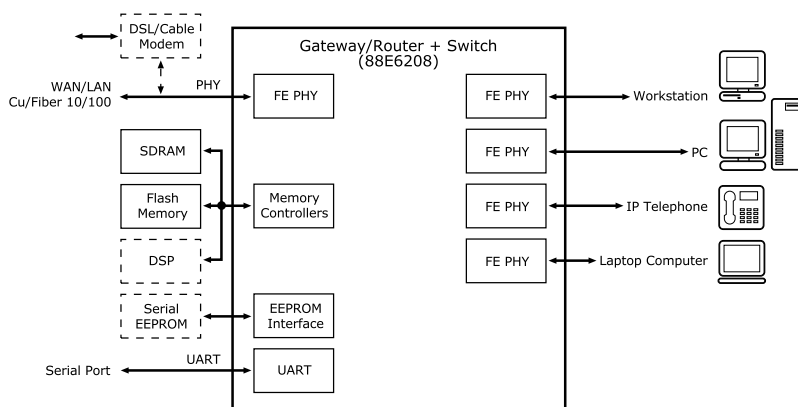


Figure 2. Link Street 88E6208 System Block Diagram

THE MARVELL ADVANTAGE: Marvell's worldwide field applications engineers collaborate closely with network equipment vendors to develop and deliver new competitive products to market on time. All Marvell products, including the Link Street 88E6208 integrated gateway router, are supported by a complete set of hardware and software tools to assist network hardware engineers with product evaluation.

For more information, visit our website at www.marvell.com.



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