

UNMANAGED AND MANAGED REFERENCE DESIGNS

FEATURES

- **BCM95395R5G**
 - Unmanaged Gigabit Ethernet (GbE) switches
 - LoopDTech™ and CableChecker™ – LoopDTech on/off push button and buzzer warning sound
 - Discrete magnetics for low cost designs
 - EEPROM for configuration—jumbo frame and LoopDTech preenabled
 - Small form factor for low-cost design
- **BCM95395R5GM switch for residential/SOHO gateway**
 - Reference platform targeted to residential/SOHO gateways
 - L2-managed
 - Onboard BCM5836 MIPS® CPU, 32 MB SDRAM, 8 MB flash
 - Broadcom software—RSTP, IGMP/MLD snooping, 802.1x, SNMP, 802.1p, 802.1Q, access control list (ACL), and more
 - Latest SDK/API
 - WAN port RJ-45 connection

SUMMARY OF BENEFITS

- **Industry-first five-port GbE switch with TCAM-based ACL for packet classification and filtering**
- **Industry-first switch with BroadSync™ HD functionality**
 - Guaranteed latency
 - Guaranteed BW
 - Synchronous timing
- **Lowest power consumption in the industry**
- **Two-layer board for unmanaged; EEPROM for low-cost configuration (unmanaged); low-cost components for the most cost-effective designs**
- **Line rate switching performance for all ports, including jumbo frames**
- **Sixth-generation Broadcom API source code and device driver**
- **Access to complete switch registers and an advanced debug environment provided by the Broadcom command line interface (CLI)**

SDK supports VxWorks® (shipped with the board) and Linux®

No additional CPU daughtercard required; single and complete reference board for residential gateway designs.

WAN port enables generic router design with one CPU and multiple WAN interface types.

BCM95395 Reference Boards

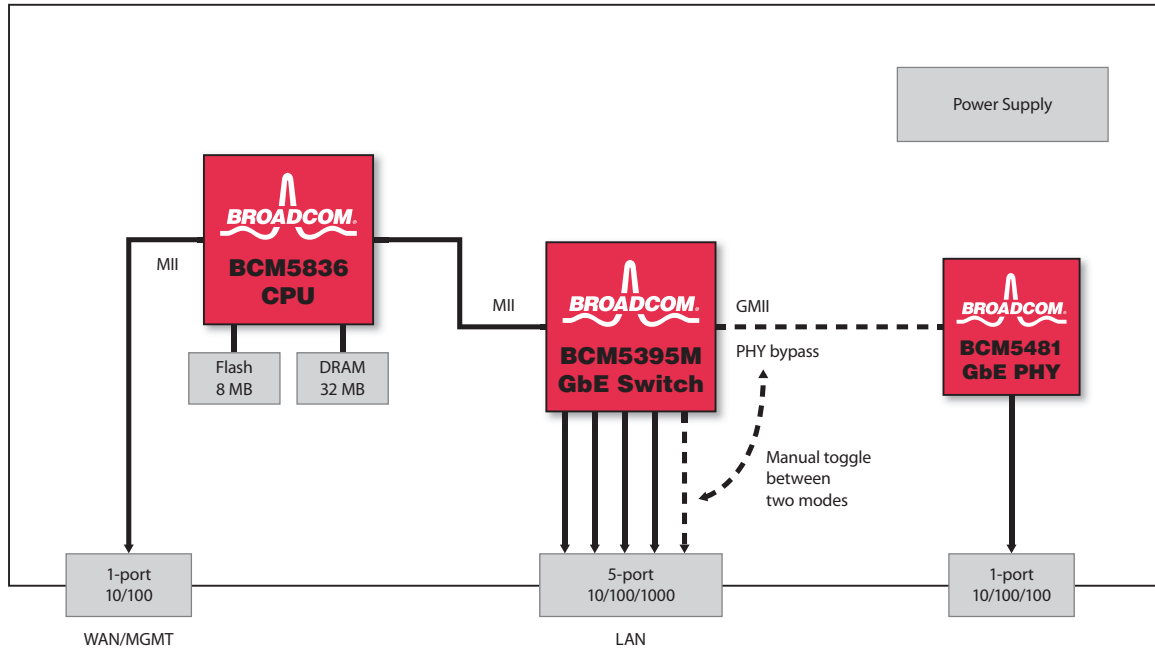


BCM95395R5G



BCM95395R5GM

OVERVIEW



BCM95395R5GM Reference Board Block Diagram

Developing Your Switch

The BCM95395R5GM is the most integrated and lowest cost solution for five-port GbE unmanaged residential/SOHO gateway switches. In addition, the reference designs provide high-quality and industry-proven software for residential/SOHO gateway applications and enable accelerated development of the following types of switches:

- Small form factor unmanaged designs
- Residential/SOHO gateway switches with support for rapid spanning tree, IGMP/MLD snooping, 802.1x, 802.1p/Q, SNMP, and more

Documentation and Software

Documentation for the BCM5395 device, reference design, and SDK 5.4.X is available online through DocSAFE.

The documents available include:

- Schematics, Allegro®, Gerber layout, EMI test reports
- Reference design user manual
- SDK software API source code and documentation
- BCM5395 data sheet, programmer's reference guide
- Application notes, including BroadSync HD introduction and usage

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Ordering Information

- BCM95395R5G—5-port GbE, unmanaged
- BCM95395R5GM—5-port GbE with BCM5836 CPU and WAN port, residential/SOHO gateway

For additional ordering information for the BCM95395R5G/BCM95395R5GM reference designs, contact your local sales representative.

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