BROADCOM®

Connecting **e v e r y t h i n g**®

BCM5352EL

PRODUCT Brief

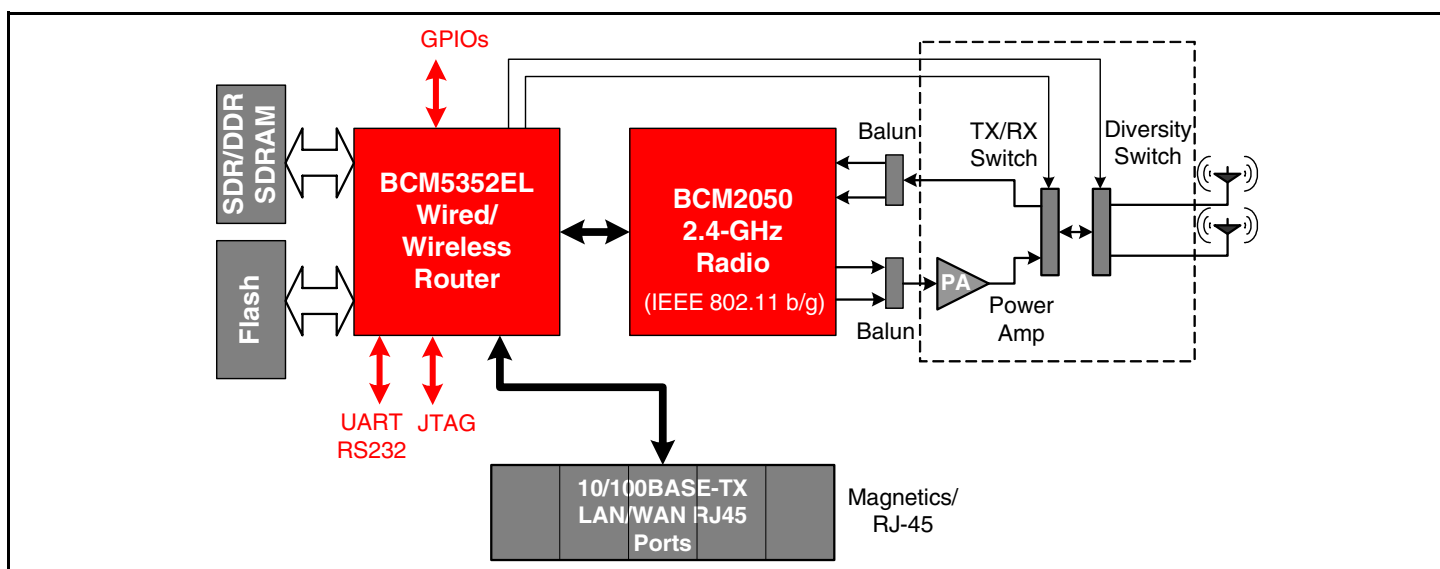# OPTIMIZED 802.11G ROUTER WITH BROADRANGE™

FEATURES

- **200-MHz MIPS32® CPU core**
  - 16-KB instruction cache, 8-KB data cache, and 256-B prefetch cache
  - Memory Management Unit (MMU) for high-level Real-Time Operating System (RTOS) support
- **Interfaces to BCM2050, a 2.4-GHz direct conversion radio**
- **SDRAM controller**
  - 16-bit 100-MHz SDRAM controller
  - SDR and DDR support
  - 2 MB to 256 MB capacity
- **Supports serial or parallel flash**
- **Five-port integrated 10/100BASE-TX/FX IEEE 802.3u compliant Auto-MDIX transceivers and LAN/WAN switch controller**
- **Sixteen GPIOs for attachment to various external devices (example: LEDs)**
- **One JTAG and two UART ports for debugging development and attaching Data Terminal Equipment (DTE)**
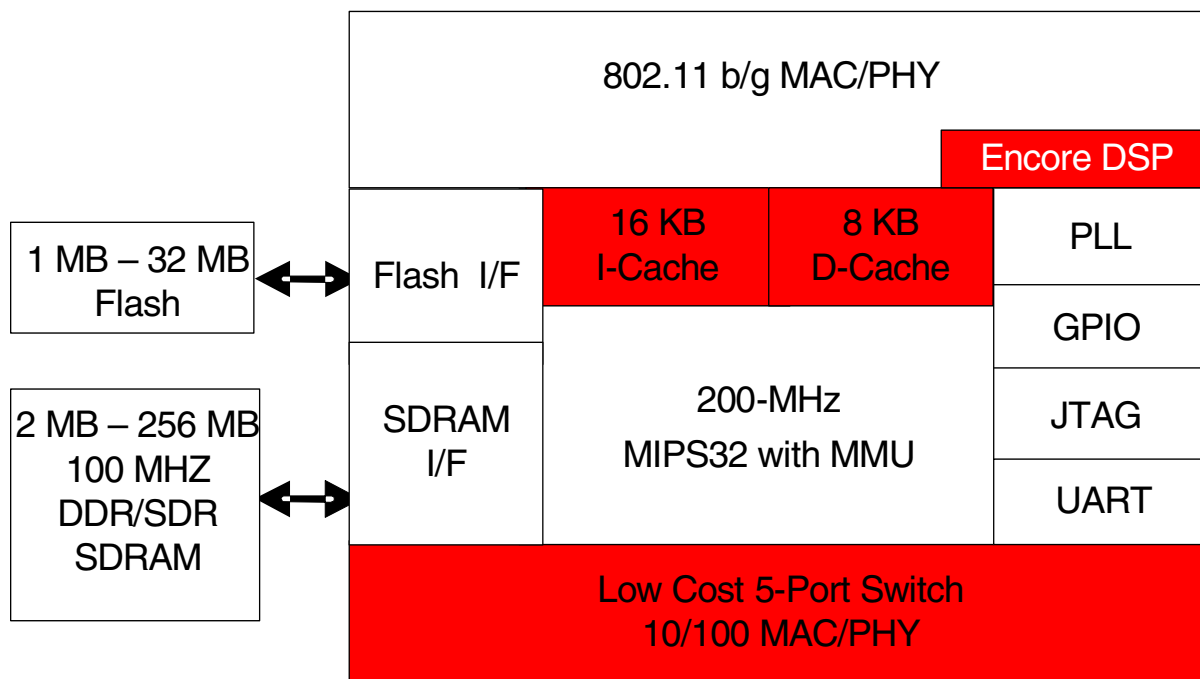- **0.18 um technology**
- **336-ball FBGA**

SUMMARY OF BENEFITS

- **The BCM5352EL is a low-cost, high performance system-on-chip (SoC) for residential and small office, home office (SOHO) markets.**
- **Time-to-market is significantly reduced through stable Linux® and VxWorks® kernels, board support packages (BSPs), drivers, and toolchains.**
- **Turnkey software is code compatible with other AirForce™ routers and access points (APs) enabling seamless migration of proprietary features.**
- **Supports high-speed performance mode (HSM) of 125 Mbps that is backward–compatible with standard 802.11 b/g.**
- **BroadRange signal processing technology enhances receive sensitivity resulting in excellent wireless throughput and range in a home and business environment.**

Low-Cost 802.11g Router

BROADCOM®

The BCM5352EL integrates a high-performance MIPS32 processor, IEEE 802.11 b/g MAC/PHY, SDRAM controller, and a configurable five-port Fast Ethernet (FE) switch.

The BCM5352EL provides wireless LAN connectivity supporting data rates of up to 125 Mbps that is backward-compatible with standard 802.11 b/g.

The BCM5352EL supports a WAN connection via its configurable media interfaces. The per-port programmable four-level priority queues enable QoS (IEEE 802.1p) for guaranteed bandwidth applications, DiffServ/TOS, and L2/L3 IGMP snooping. The IEEE 802.1Q VLAN allows flexible implementation of VLAN grouping and WAN port segregation.

Applications running on the BCM5352EL leverage field-proven software which includes SecureEasySetup™ and comprehensive wireless network security support that comprises WEP/WPA/WPA2 encryption.

The BCM5352EL offers the industry's most aggressive home router integration and enables the lowest bill of materials (BOM) solution cost.

Broadcom's superior technology and innovation also benefit manufacturers with faster time-to-market and end products that are differentiated from the competition through rich features, exceptional range, and outstanding reliability.

Connecting
e v e r y t h i n g ®

BROADCOM.