



## BCM7115 SINGLE-CHIP SET-TOP BOX WITH PVR

### BCM7115 FEATURES

- 1024/256/64-QAM variable symbol rate receiver supporting ITU-T J.83 Annex A/B/C
- QPSK out-of-band receiver and a QPSK to 256-QAM upstream burst modulator
- DAVIC 1.2/1.5 MAC
- Dolby® AC-3/MUSICAM® audio decoding
- 2D/3D graphics engine
- NTSC/PAL video decoder
- NTSC/PAL video encoder
- BTSC decoder
- External bus interface (EBI) serving as local bus
- High-performance, 200-MHz RISC MIPS32™ processor with 8-KB I and 8-KB D caches
- USB host with dual port (OHCI)
- Peripheral devices include IEEE 1394 interface, POD interface, V.90 Softmodem support, LED, UARTs and IDE controller
- Personal video recording (PVR) support with IDE controller, 3DES, and dedicated DMA engines
- Single unified memory architecture
- Software device drivers supporting multiple operating systems and middlewares
- BCM7040 MPEG-2 encoder interface

### SUMMARY OF BENEFITS

- Integrated front-end and back-end results in the most cost-effective, single-chip, set-top box solution with personal video recording (PVR)
- PVR engine supports time shifting on a program being viewed and recording of another program simultaneously (watch and record)
- Support for DAVIC and DCII enable deployment in major cable markets worldwide
- Industry-leading compact form factor design is enabled by high integration
- High-performance RISC processor can support today's demanding set-top box operating systems and applications
- External QAM demodulator support for PVR watch and record

**BCM7115 Single-Chip Set-top Box with PVR System Block Diagram**

