



## HIGH DEFINITION VIDEO UMA SUBSYSTEM WITH 2D GRAPHICS

### BCM7020 FEATURES

- **ATSC-compliant, All-Format MP@HL MPEG-2 video dual decoder with personal video recording feature**
  - Dual channel decode with simultaneous standard definition (SD) display of each channel content
  - Single channel high definition (HD) decode with simultaneous display of both HD and scaled SD content
  - Simultaneous dual record, dual playback personal video recording (PVR) with encryption
  - Six on-chip video DACs
  - DVD playback
- **Dolby Digital (AC-3)/MPEG multichannel audio decoder with SPDIF output**
- **Stereo audio DACs**
- **Advanced 2D/3D-effects graphics engine**
  - Studio-quality text and graphics at HD resolution
  - Supports multiple layers and windows
- **NTSC/PAL analog video decoder**
- **NTSC/PAL/HD video encoder**
- **Bus bridge to memory, local bus, and PCI**
- **POD support including DVS 213 DES descrambler**
- **DVT and DC2-compliant transport demultiplexer with DVB, DES, and Multi2 descramblers**
- **Support for 64 PIDs and 64 section filters**

### SUMMARY OF BENEFITS

- Provides a cost-effective solution for high definition and standard definition video and graphics systems common to cable and satellite applications
- **PVR capability enables personal viewing and scheduling, video-on-demand (VOD), and VCR "trick mode" effects on any video stream**
  - Encryption ensures copy protection of recorded programming content
- **Includes simultaneous high definition and standard definition analog output for watch and record capability**
- **Advanced 2D graphics system allows applications such as internet browsers and electronic program guides to deliver studio-quality text and graphics on television monitors**
- **3D effects create studio-quality screen transitions and adds a whole new dimension to electronic program guides**
- **PCI interface allows for direct connection of cost-effective SuperI/O devices**
- **High-performance DMA capability can be used for cable modem traffic**
- **Broadcom-developed device drivers enable rapid software development cycle**
- **Supports DVS POD requirements**

### BCM7020 Advanced Video, Graphics, and Audio Subsystem with Bus Bridge

