

## Set-Top Box

# Interactive Home Entertainment

## Market Brief

Our living rooms have welcomed ambassadors of entertainment ranging from stereos to televisions to VCRs. Imagine having multiple forms of entertainment combined into one easy-to-use device. A box that sits on your television and puts email, high-end video, Web surfing and a

**A Set-Top Box is an interactive home entertainment device that enables Internet access, streaming video and customized information via a traditional television.**

world of information at your fingertips. Now there is a device that represents an ideal marriage of information and entertainment —

the interactive set-top box (STB).

### Convenient Internet Access

One of the most appealing features of the STB is in-home Internet access. For many consumers, the current ways to access the information superhighway prove too costly or too intimidating. The set-top box platform offers a convenient, affordable tool for accessing Web pages and email. Rather than a complex computing device, a set-top box is connected through cable or telephone lines while the television serves as a “monitor” for viewing information.

### A World of Information

Want weather and traffic updates? What about convenient on-line shopping? Or a play-by-play report of the ball game? Serving as a gateway to information, a set-top box brings news, sports, e-commerce, and electronic programming guides into your living room. And since interactivity enables customization of information, STB users can select personalized news, programming alerts, stock updates and more.

### Seeing Stars

Another benefit of an interactive set-top box is the device’s capacity for delivering vibrant images and crystal clear sounds. A set-top box can play popular DVD movies, the high end of video technology. In addition, streaming video capabilities position STBs to receive video-on-demand with swift downloading and high-performance playback.

### Superior Solution

Hundreds of Internet software programs have been written for the x86 processor core. For maximum compatibility with the Internet medium — including Web plug-ins, games and e-commerce — an x86-based set-top box provides the most advanced form of interactive entertainment.

### Interactive Set-Top Box

- Instant Internet access
- Streaming video
- Electronic programming guides
- Personalized infotainment

**National Semiconductor, a leader in processor, mixed-signal and analog technologies, develops total system solutions that provide the power, connection, and human interface necessary to drive the emerging information appliance market.**

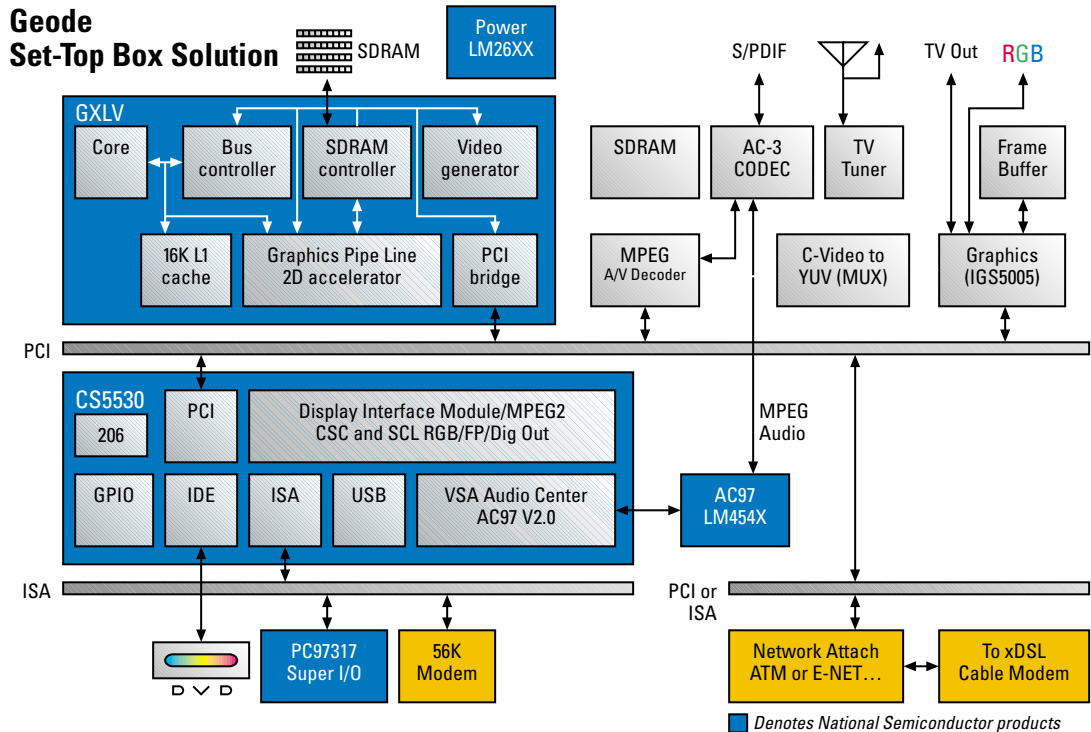
**The Geode™ product family, featuring a wide range of silicon and system solutions, enables customers to address the needs of the emerging information appliance market — quickly and efficiently.**

# Set-Top Box

For more information about National's total system solutions for the information appliance market, visit [www.national.com/ia](http://www.national.com/ia)

## National Semiconductor's Total System Solutions

- **Power** — Integrated x86 processor
- **Communications** — Wireless and Ethernet
- **Management** — Power Consumption
- **User Interface** — Analog



## National Semiconductor — Designing the Future

National Semiconductor is committed to delivering trend-setting, cost-effective products and platforms to drive the information appliance market. The Geode product family, featuring a wide range of silicon and system solutions, enables customers to address the needs of the emerging information appliance market — quickly and efficiently.

- *Integrated x86 processors* that leverage an extensive computing infrastructure for maximum compatibility
- *Communications technologies*, including Ethernet and wireless, to make the connection to the information superhighway

- *Power management products* to maintain ideal power consumption for the small form factors of IA devices
- *Analog technologies* that make human interface with the digital world possible, enabling a rich user experience

In leveraging its processor, mixed-signal and analog expertise, National Semiconductor is championing the emergence of next-generation access solutions designed to bring information to people — anytime, anywhere.

