STB decoders with integrated demodulation and IP capability

A family of secure, high-performance MPEG-2 decoders for low-cost satellite and cable set-top boxes and DVRs



Designed to meet the needs of the rapidly expanding worldwide market for low-cost MPEG-2 set-top boxes and DVRs, ST extends its range of products with the STi5197 and STi5189. Through unprecedented levels of integration, these products deliver greatly improved performance and a reduced bill of materials.

Both products integrate a demodulator, Ethernet interface and USB 2.0 host controller, making them ideally suited for the growing added-value STB market.

To address the needs of the pay TV operators, both devices include ST's advanced security features safeguarding content investment.

Key features

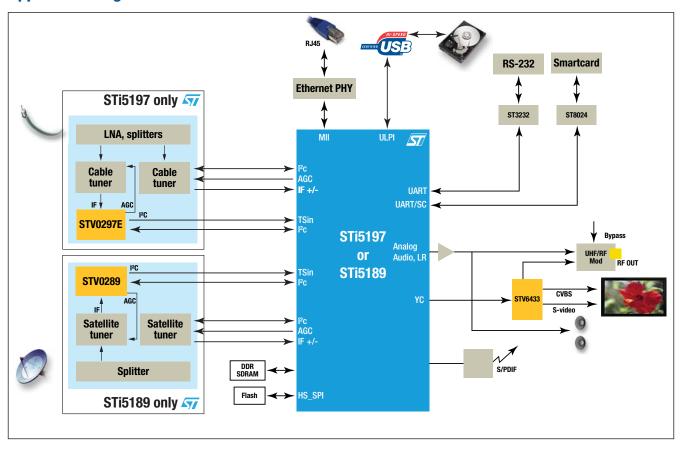
- 350 MHz Linux and OS21-capable ST40 CPU
- ITU-compliant 256 QAM demodulator with FEC (STi5197) or DVB-S demodulator (STi5189)
- Memory interface supports NOR, NAND and Serial Flash
- Intelligent power management system
- Integrated voltage regulator and high powered video DAC
- Integrated advanced security meets requirements of all major CA vendors
- USB 2.0 host and Ethernet interfaces
- 23 x 23 mm or cost optimized 15 x 15 mm PBGA packages

Key benefits

- Supports all industry-standard middlewares and applications, including DVB-MHP
- Applicable for cable, satellite and hybrid STBs
- Field upgrade DVR available over USB
- Supports time shifting without need for external hard drive, using NAND Flash memory
- Cost-effective package options allow 2-layer PCB
- Highly optimized for reduced bill of materials



Application diagram



Development platforms

The STi5189 and STi5197 are both supplied with evaluation platforms that enable immediate software development. Complete schematics are available that allow OEM's to customize the platform to meet their requirements.



© STMicroelectronics - August 2008 - Printed in Italy - All rights reserved

The STMicroelectronics corporate logo is a registered trademark of the STMicroelectronics group of companies. All other names are the property of their respective owners.

For selected STMicroelectronics sales offices fax:

China +86 21 52574820; France +33 1 55489569; Germany +49 89 4605454; Italy +39 02 8250449; Japan +81 3 57838216; Singapore +65 6481 5124; Sweden +46 8 58774411; Switzerland +41 22 9292900; United Kingdom and Eire +44 1628 890391; USA +1 781 861 2678

Full product information at www.st.com

