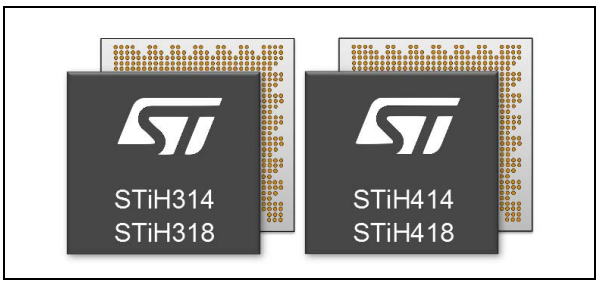
STiH314, STiH318, STiH414, STiH418

ARM Cortex-based, UHD 60 fps, multimedia server and client platforms

Data brief



Features

- Quad-core SMP ARM® Cortex™ application CPU offering:
  - 12000 DMIPS for STiH318 and STiH418
  - 8000 DMIPS for STiH314 and STiH414
- Quad-core GPU for high-performance 3D graphics
- High-quality Faroudja® video subsystem, including video decode/encode, pre- and post-processing for display and transcoding
- High quality ultra HD decoding up to 2160p60, including:
  - HEVC L5.1 Main 10
  - VP9 (STiH318 and STiH418 only)
- Transcode engine on STiH414 and STiH418 only
- Advanced security supporting concurrent conditional access, watermarking and DRM, to protect premium broadcast content
- Wide connectivity, including USB 3.0, HDMI 2.0, PCIe, eSATA and Gigabit Ethernet
- Dedicated interfaces to a range of companion front-end solutions, including broadcast (satellite/cable/terrestrial), MoCA 2.0, DOCSIS 3.0/3.1, and 802.11ac Wi-Fi devices
- 28 nm process technology

Description

ST's STiH314, STiH318, STiH414 and STiH418 system-on-chips, provide full-featured solutions for premium, high-quality, 60 fps UHD client and server set-top boxes.

These SoCs support integrated broadcast and broadband services, as well as the latest set-top box middleware and broadband software solutions.

HEVC is the native video compression standard for UHD broadcasts, but additionally, allows operators to offer more HD channels for a given bandwidth, offer the same HD content with less bandwidth, or to store more video content on HDD or Flash storage.

The STiH318 and STiH418 integrate VP9 decoding, to support YouTube™ viewing in ultra-high definition, for example.

The STiH414 and STiH418 support simultaneous multi-stream video transcoding. ST's Faroudja® transcode engine provides best-in-class transcoding capabilities for multi-screen streaming across consumer and hand-held devices. This allows operators to optimize network bandwidth, while offering an excellent quality of service throughout the home.

1 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Jul-2014	1	Initial version.
27-Aug-2014	2	Updates to *Features* and *Description*.
18-Dec-2014	3	Updates to *Features*.