

WiVu™ Technology

Product Brief



WiVu Technology Overview

Based on Cavium's high performance PureVu™ video processor family, WiVu is Cavium's standards-based end-to-end solution for interactive, multi-room wireless display and home video distribution applications.



Key components of Cavium's WiVu solution

Standards-focused

- WiVu is based on widely deployed technologies, such as ITU H.264 video compression, IEEE 802.11 Wi-Fi transmission, HDCP 2.0 content protection, and standard IP protocols for transport.
- Cavium is also fully committed to the industry's standardization efforts addressing Wi-Fi based wireless display applications, and expects to be fully compliant once such standards are ratified.

High Performance

- Leveraging Cavium's PureVu™ 2D and 3D video processor technology, WiVu™ offers pristine 1080p HD video quality
- Cavium's PureVu™ video processors are designed to provide the highest video transmission quality for all types of content, including movies, text and graphics

Interactive

- PureVu's patented Super Low Latency (SLL™) technology enables the lowest compression latency in the industry allowing WiVu™ to address a wide range of fully interactive applications including remote desktop and gaming.
 - 5ms end-to-end latency over Ethernet
 - 20 ms end-to-end latency over Wi-Fi
- Support for back-channel control and command transmission over Wi-Fi is another key attribute of the WiVu™ solution, providing support for:
 - IR remote signals
 - Keyboard/mouse (HID)
 - Touch-panel control
 - Gaming controllers

commands to be transmitted back to the source in a robust and real-time fashion to enable highly interactive applications.

Multi-room

- WiVu also incorporates key IP for video Quality of Service (QoS) called SMART (Secure Minimum-latency Adaptation and Retransmission Technology) for robust multi-room wireless video.
- SMART incorporates an advanced rate adaptation and retransmission scheme that uses information from the Wi-Fi channel, as well as feedback from the receiver, to optimize the behavior of the transmitter for the varying conditions of the Wi-Fi channel.
- With SMART, Cavium technology enables 1080p wireless video at the edge of the home.