

## KestrelMedia™ Stingray Network Daughtercard

Reference Board for Simple Add-On 802.11a/g/n and Ethernet Connectivity to Existing CE Designs



**Stingray Network Daughter Card (with 802.11a/g radio)**

Product Brief

The *KestrelMedia™* Stingray daughtercard design enables robust WiFi and Ethernet connectivity into a variety of Consumer Electronics (CE) product designs, including TVs, DVD players, Home Theater systems, and Set Top Boxes (STBs). Stingray centers on connecting to mainstream multimedia ICs and adding a tuned, high performance networking subsystem to optimize the end user's experience with streamed multimedia. It serves as a very fast prototyping tool or as a production reference implementation for quick time to market—Stingray can be added into many production tested hardware systems with little or no modifications to the existing hardware.

Stingray includes general purpose parallel I/O intended for connectivity to the core product's multimedia codec, plus WiFi (via miniPCI card) and 10/100 Ethernet connectivity. Initial support for Stingray makes use of the parallel I/O as an IDE slave interface and connects into a variety of Zoran and ESS Technology reference designs for DVD players, STB systems, Flat Panel TVs, Digital Picture Frames and Storage/Card Reader Multimedia Players.

Stingray is based on Ubicom's IP3023 StreamEngine™ network processor, providing best in class performance for Ethernet and 802.11a/g/n connectivity while maintaining a cost effective implementation. Stingray provides network connections, TCP/IP and UPnP stacks, and Digital Living Network Alliance (DLNA™) guidelines compatibility. When streaming files over the home network, it uses DLNA protocols to discover, classify and play back remote audio/photo/video files from a wide variety of servers.

Stingray provides a clear path for network connectivity integration into CE products in a very cost effective manner by leveraging existing multimedia codec ICs and a mainstream network processor used in WiFi home routers and related home networking infrastructure products.

### KEY FEATURES

- **Daughtercard implementation**
  - Simple add-on board for quick prototyping or production reference design use
  - Leverages existing mainstream codec technology used in today's Consumer Electronics products
  - General purpose I/O pins for connectivity into multimedia codec
    - IDE host/slave, GPP, etc.
    - Supports multiple codecs today
  - Powered over I/O header or via external supply

### SPECIFICATIONS

- **Networking Connectivity**
  - Best in class networking performance via tuned network processor and networking software
  - 10/100 Ethernet
  - miniPCI for WiFi radio cards
  - 802.11b/g, a/b/g, MIMO, draft .11n capable (Atheros radios)
  - Includes:
    - TCP/IP
    - Ethernet-WiFi bridge
    - UPnP
    - WEP/WPA
  - DLNA v1.5 compliant design - works with Windows Media Connect (WMC) and other UPnP servers
- **46-pin General purpose I/O pin header**
  - Connectivity to multimedia codec
  - S/W configurable
  - Includes power and ground I/O
  - Mini header also available