

Summary

The Kernel Labs TV Tuner SDK is designed to provide a high-quality solution for existing digital TV tuner products. The SDK provides a 100% userland solution for access to various Digital TV USB products, with no need for special kernel drivers. This makes the solution ideal for embedding TV tuner functionality directly into applications and/or operating on platforms where the kernel cannot be changed (e.g. non-rooted Android devices).

Leveraging our extensive experience writing Linux TV drivers (both open source drivers and commercial), the product seeks to take into account the specific needs of commercial organisations as opposed to casual end-user TV watching. The SDK is targeted at commercial application developers looking to leverage digital TV tuners with minimal integration effort and on platforms which may be resource constrained or otherwise locked-down.

Features:

- Supported on Linux x86/x86-64 with kernels 3.2+
- Support on non-rooted Android 5.X distributions on x86, armv7, and arm64 processors
- Support for devices with over-the-air ATSC and ClearQAM 64/256, DVB-T2, DVB-T, DVB-C
- No need for recompilation of kernel, presence of kernel headers, or creation of kernel modules
- Technical support included in the license cost
- Optimised for low digital tuning time, fast channel changing
- Easy to use API. Static library which can easily be embedded in existing userland applications
- Advanced statistics for signal quality and QAM constellation display

Application Integration:

- Libusb based backend. No kernel drivers required
- Includes facilities for delivery of complete transport stream from device
- Sample applications included for command-line Linux and Android
- Simple API: initialize device, issue tuning request, query for lock status, and define callback to receive transport packets once locked
- Sample code for service discovery and PID filtering included

Supported Devices:

Product		HVR-955Q	WinTV Dual HD	WinTV Solo HD	H837	H377	MC8782
Vendor		Hauppauge	Hauppauge	Hauppauge	AVerMedia	AVerMedia	MaxMediaTek
Digital Standards	ATSC	•	• Dual		•		•
	ClearQAM	•	• Dual		•		•
	DVB-T2			•		•	•
	DVB-T			•		•	•
	DVB-C			•		•	•
Physical	Form Factor	USB	USB	USB	USB	MiniPCIe	MiniPCIe



Specifications:

Digital video capture:

- US Market

- Television standards: ATSC: 8VSB. Cable: QAM64, QAM256
- Stream format: MPEG2 Transport Stream with MPEG2 video and AC3 audio
- USB bandwidth: Maximum 19.2 Mbit/sec for ATSC, 38.4 Mbit/sec for QAM256

- European market:

- Television standards: DVB-T, DVB-T2, DVB-C
- Stream format: MPEG2 transport stream with MPEG2 or H.264 video (varies by region)
- USB bandwidth: varies by standard and modulation scheme

System Requirements:

- USB 2.0 port (for USB based products)
- Full length miniPCIe slot (for MC878U product)
- Ubuntu 12.04 LTS or higher (both x86 and x86-64 supported)

Availability:

- Currently shipping
- Site licenses available
- Per-unit licenses available