

The ESW-01 is the first in a family of middleware offered by Elliptic. DTCP was designed to protect high value digital content such as music and video for transmission over Firewire, USB, MOST (an automotive bus) and TCP/IP networks. The middleware offers a highly configurable solution supporting both Full and Restricted Authentication through a build option, System Renewability as well as a sample video streaming application. It natively supports implementations with Elliptic's ESM-01 DTCP Embedded Security Module or it can be configured for processors with and without crypto offload capability. This product brief outlines the ESW-01 to the extent that is possible under the confidentiality restriction specified by the DTLA. Detailed technical specifications for the ESW-01 can only be released to other DTCP licensees.

### Key Features:

- Initial release features DTCP-IP and Linux
- iTRON support now available
- Restricted or Full Authentication configurations
- Portable architecture

### Applications:

- Consumer Electronics such as Cameras, DVD Players, Set-top Boxes, Gateways
- Automotive Applications in Entertainment Consoles

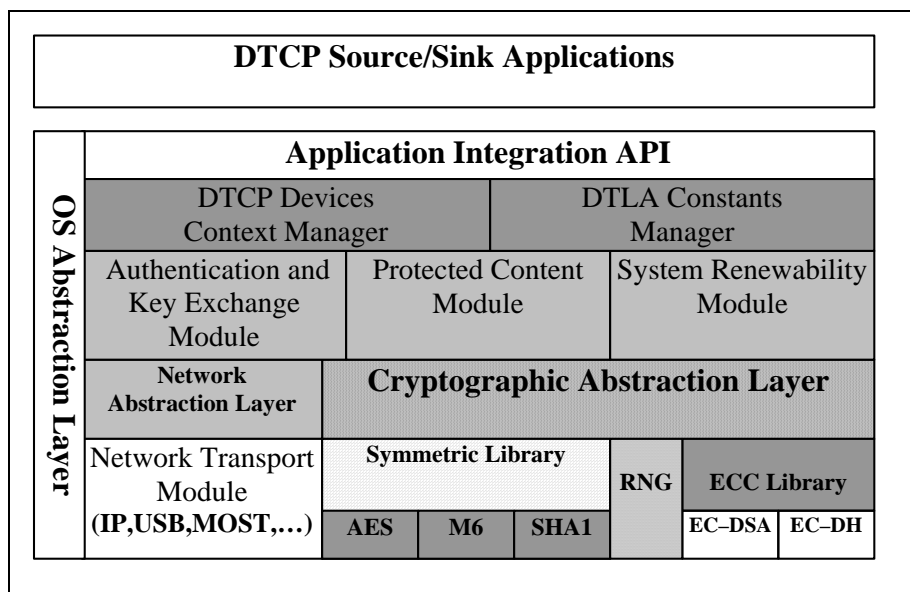


Figure 1 ESW-01 Architecture

## General Description

The DTLA was founded by Hitachi, Ltd., Intel Corporation, Sony Corporation, Toshiba Corporation and Matsushita Electric Industrial Co. Ltd. to build an interoperable, industry standard digital rights management design that could be used by manufacturers of consumer electronics products. The standard specifies the encryption of high value content, key exchange mechanisms, mutual authentication and repudiation of devices that have been compromised. Initially the DRM capabilities focused on interconnection technologies such as Firewire and USB but they have been extended to include MOST for automotive applications and TCP/IP for broader deployment in home networks based on Ethernet and/or Wi-Fi. The licensing of the technology is governed by a Licensing Authority called the Digital Transmission Licensing Authority ([www.dtcp.com](http://www.dtcp.com))

The license that Elliptic signed with the DTLA prohibits disclosure of the technical details of the rights management design except those aspects already in the public domain. Complete disclosure of the technical details for the ESW-01 is therefore only available to companies that have signed a license with the DTLA.

## Video/Audio Streaming Demonstration Capability

The ESW-01 software includes video or audio streaming of content based on two Linux PCs. The demonstration illustrates distribution of both unprotected content and content encrypted through DTCP. The diagram below illustrates the demonstration system.

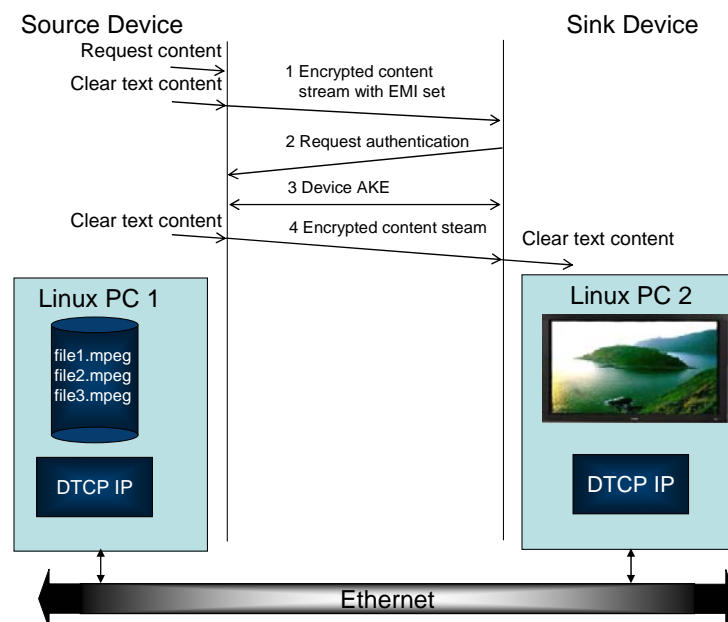


Figure 2 DTCP Demonstration Software

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