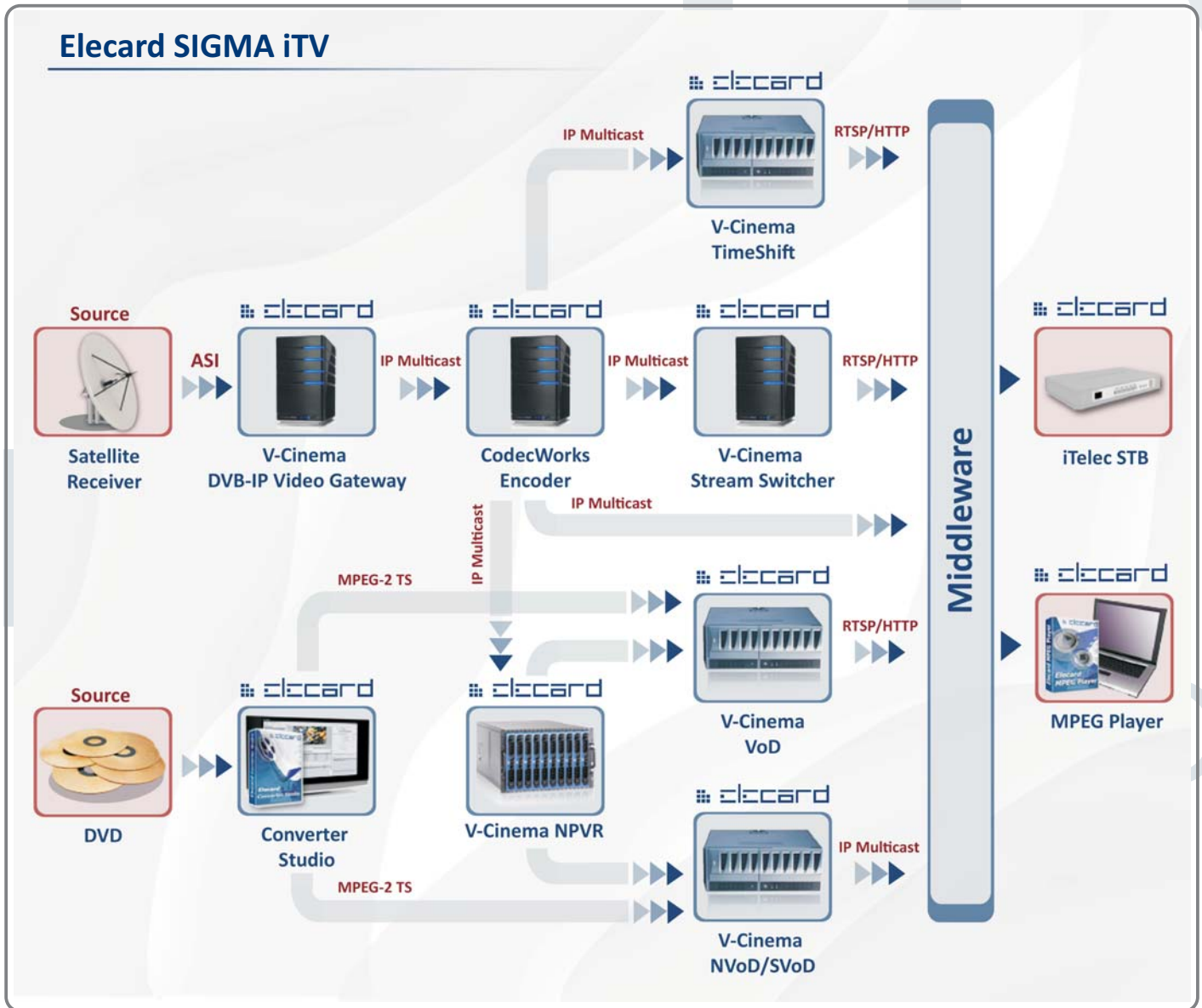


Elecard SIGMA iTV

Elecard IPTV Solution

Elecard SIGMA iTV solution is the right choice for providing IPTV interactive services and building custom IPTV servers based on its components.



Target markets

- System integrators on Hospitality and IPTV markets
- TV and Internet service providers
- Telco and mobile operators
- Set-top box (STB) developers
- Digital TV product developers

Live encoding and video compression

Real-time [CodecWorks Encoder](#) – transcoding and video compression software servers that bring outstanding video quality and have a wide variety of input interfaces.

Flexible design based on Elecard's in-house software components allows system integrators to build turn-key encoding systems of superior quality providing advanced functionality and technically unrestricted scalability.

Main features

- Encoding on one 2-U size hardware server
 - up to 2 AVC Full HD channels
 - up to 10 AVC SD channels
 - up to 3 MPEG-2 Full HD channels
 - up to 20 MPEG-2 SD channels
- Supported video formats: MPEG-2, AVC/H.264, MPEG-4.2, H.263
- IP Multicast output
- IP, CVBS or SDI input
- Advertisement and logo insertion
- Quick back up mechanism
- Centralized control over several encoding servers
- Denoising function with NVIDIA CUDA cards

Product highlights

- Inexpensive solution for regional advertisement and operator's logo insertion
- Extreme effectiveness of computing resources utilization significantly cuts expenses for IPTV headend hardware
- Highest video quality, unachievable for hardware solutions
- No need for full equipment replacement to improve performance, any component such as CPU can be replaced if need arises

The encoder is supplied as software solution with recommendations upon hardware options, or as a turn-key server.

SDI and ASI video capturing



[Elecard HDAccess 2](#) is a PCI-E board for receiving and transmitting uncompressed video and audio streams via HD/SD SDI and MPEG-2 TS data via DVB-ASI. The device is developed specifically for realtime HD and FullHD video processing.

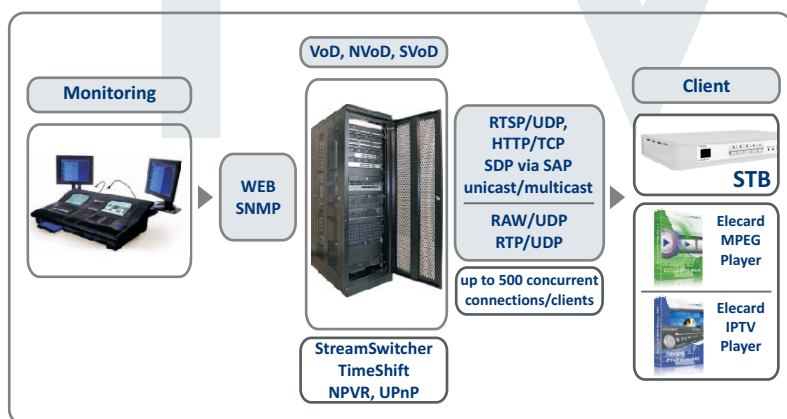
The card can be easily used in combination with CodecWorks Encoder as a source of signal

Product highlights

- **Unique functionality.** HDAccess 2 is the only capture card which combines DVB-ASI and SD/HD SDI interfaces operating in full duplex mode, thus saving money on hardware units for specific projects.
- **Scalability.** LVDS interfaces available on the board make it possible to install additional daughter-boards with up to 12 input or output interfaces.

- **Delivery.** The product can be delivered as a ready-to-use board or a reference design, thus optimizing time to market and resource consumption or saving money.
- **Flexibility.** The device can be easily tailored to your needs. Color Space Conversion, Scaling, Remultiplexing, and the other features are available upon request.
- **Development.** New functions are constantly added to HDAccess 2 to meet current and future customer requirements.

Interactive TV and on-demand services



Elecard V-Cinema is a set of software servers under the single management interface that makes it possible to build multifunctional and reliable solutions for organizing IPTV services in a variety of networks including digital interactive TV services offered in hotels and by local Internet service providers.

Integration opportunities, interoperability of the products and scalability of the solution will allow operators to use their budget and project resources more efficiently.

Elecard V-Cinema line comprises the following software servers:

- V-Cinema VoD – streaming of multimedia content stored on local or network disk arrays to end-user receivers (IP STBs, PC Players) on user request (Video on Demand)
- V-Cinema SVoD – broadcasting of stored multimedia content according to the predefined schedule via IP multicast (Scheduled Video on Demand)
- V-Cinema NVoD – broadcasting of stored multimedia content as several time-shifted samples via IP multicast (Near Video On Demand)
- V-Cinema NPVR – recording of specified video streams for their further use via VoD/SVoD/NVoD services (Network Personal Video Recorder)
- V-Cinema Stream Switcher – multicast or unicast streaming via HTTP, RTSP, or RTMP unicast "on demand" in local networks and Internet (Internet streaming)
- V-Cinema TimeShift – multicast or unicast streaming via HTTP, RTSP, or RTMP unicast "on demand" with the options of timeshifted playback, pausing and trick play
- V-Cinema UPnP Media Server – delivery of live and stored multimedia content to end-user set-top boxes in UPnP server mode with DLNA and UPnP protocol support

Product highlights

- Wide choice of interfaces for smooth integration with CA/DRM, billing and middleware systems
- SIGMA iTV Web Configurator control interface for the whole product line
- Number of simultaneous client requests limited only by server hardware configuration

A server is supplied as software solution with recommendations upon hardware options, or as a turn-key server.

Video content preparation and processing

[ElecCard Converter Studio Pro](#) is an application designed for professional conversion of media data to AVC/H.264, MPEG-1/2, MPEG-4 formats at high-speed with high picture quality. Cluster encoding makes huge multimedia archives conversion a quick and pleasant job thank to sharing encoding load among computers in the local network.



Content creators, broadcasters, digital signage and postproduction companies working with large amounts of media content enjoy full access to encoder settings as well as the ability to choose optimal encoding parameters from the profile list.

ElecCard Converter Studio Pro is a must-have application where high-quality content preparation is required for Video on Demand and other video broadcasting services.

Features

- **Watch folder mode.** The program automatically scans the chosen folder for new media files and if any are found, they are added to the task list with the predefined encoding settings.
- **MPEG-2 encoding.** Enables you to create DVD, HDV, HD-DVD and Blu-ray-compatible files that can be later written to a disc or other data carrier.
- **AVC/H.264 encoding.** Using the cutting-edge encoding format you can prepare media content for different purposes, from network broadcasting to HD encoding for HD-DVD and Blu-ray discs.
- **Two-pass MPEG-2 and H.264 encoding.** Significantly improves the quality and makes encoding with the set filesize possible.
- **Indexing of MPEG files.** After you have encoded MPEG files, you can create an index file which is necessary for network broadcasting.

- **MPEG-1 Layer II, AAC (HE AAC + PS) and WAV PCM audio encoding.** A wide variety of audio formats lets you choose a necessary format for each task.
- **Full-featured multi-channel stream support.** The program allows you not only to open a multi-channel stream and choose the needed channel, but also to create multi-channel streams, applying individual settings for each channel. MPEG multiplexer is also optimized for creating multi-program files.
- **Multiplexing into AVI, MP4 and MPEG-2 PS/TS with Elementary Stream saving.** A wide variety of file formats and the option of Elementary Stream saving makes all future work with the files a lot easier.
- **Set of default profiles for optimal encoding.** Using our default profiles, you can create media files compatible with different devices.
- **Creating, editing and saving profiles.** If you are not satisfied with the default profiles, you can create a new one, save it and use in your future tasks.
- **AVS (Avisynth Script).** Avisynth allows you to perform the non-linear video editing, cropping, deinterlacing, trimming, color correction and many other things.

Home media centers and set-top boxes

Elecard iTelec Set-Top Boxes — multi-functional end-user devices and full-featured home media centers for Digital TV subscribers and home users.



[Elecard iTelec STB 820-10](#) is an elegant SD-resolution hybrid set-top box for IPTV and DVB-T applications. Advanced design and reach feature set make the device a multi-functional home media center, home router, and high quality MPEG player both for video streams and stored files, including video movies and photos from USB memory stick.

Features

- MPEG-2 and AVC/H.264 video and AAC audio support
- MPEG-2 TS, RTP and RTSP, UDP multicast, HTTP and RTMP protocol support
- DVB-T/DVB-C support
- Files playback from a USB media storage or remote folders (Samba)
- Internet browsing
- Convenient TV program browsing provided by timeline-based EPG menu
- Simultaneous slide-show preview and music playback
- VoIP services (SIP, RJ-11 phone jack) with user-friendly GUI
- Quick firmware upgrade via IP
- Two LAN slots for STB to operate as a home router
- Playback of streams delivered over HTTP for watching video from YouTube
- Middleware SDK for effortless integration of any Middleware
- Built-in advanced GUI that makes it possible to build IPTV services without Middleware

Related IPTV software

- [ElecCard Stream Inspector](#). A software tool designed for real-time analysis of media streams in MPEG-2 TS/PS, MPEG-1 SS, MPEG-1 Video/Audio, MPEG-2 Video/Audio, MPEG-4 Video/Audio, AVC, AAC and LPCM formats. Stream Inspector makes it possible to analyze streams received from the network or DVB-ASI boards as well as obtain streams from files stored on your local or network hard drive.
- [ElecCard IPTV Player SRD](#). A software toolset that allows you to implement your own PC clients for IPTV, web services. ElecCard IPTV Player SRD comes with an engine, full documentation, sample application source code and 1 month of technical support services.
- [ElecCard MPEG Player](#) and [ElecCard AVC HD Player](#). High quality, full-featured multimedia players supporting the newest formats, designed to provide you with outstanding video and audio playback. ElecCard players can be used as a client part of IPTV services.
- [ElecCard MPEG-2 PlugIn for WMP](#) and [ElecCard AVC PlugIn for WMP](#). Packages of components for media data demultiplexing and decoding as well as for receiving and decoding of streaming video from network (UDP, RTP over UDP, TCP, RTP over TCP) with the RTSP protocol support.

About ElecCard

Founded in 1988, ElecCard is a leading provider of software products for encoding, decoding, processing, receiving and transmitting video and audio data in different formats (MPEG-2, MPEG-4, AVC/H.264, Motion JPEG 2000 and others).

ElecCard offers a wide range of software solutions for professional digital TV broadcasting market, which includes streaming, transcoding, video-on-demand servers, professional software products and software development kits (SDKs). The company develops TV set-top boxes and software programs for consumers, prosumers, and professionals. What makes ElecCard different is that it provides everything an integrator needs – reference design, software, components and technical support – in one place.

The company offers technologies for a wide area of applications including solutions for satellite surveillance systems, terrestrial, cable, and satellite broadcasting, security systems, video for cellular phones, and home multimedia centers.