

Advanced Video Codec

The support of low bit-rate advanced video codecs provides operators with the opportunity to grow revenue generating services while maximising the efficient use of network bandwidth and creating the ability to:

- Reach a greater number of subscribers
- Increase the number of available interactive and multicast channels
- Enhance viewing experience with High Definition (HD) channels

High Definition

The support of HD video offers an exciting and dramatic viewing experience, with greater realism and detail especially in large display formats. If network bandwidth permits, HD services can exploit the ability of the AmiNET130 to support HD compatible displays at 720p and 1080i resolution, both MPEG-2 and MPEG-4.

Compact and Elegant

The AmiNET130 is enclosed in a uniquely stylish case inspired by the award-winning AmiNET100 design.

Connectivity

The AmiNET130 provides HDMI and a compact AV interface that allows flexible options to cover a wide range of video and audio outputs together with an optical output for multi channel surround sound. Additionally the USB connector allows interfacing to a wide variety of devices.

Home Networking

The AmiNET130 is Smartfoot™ Compatible and works with a wide range of home networking options. The Smartfoot™ simplifies home networking installation by taking advantage of the unique form factor of the Amino STB. The SmartFoot™ is simple and easy to install and reduces the number of additional cables going between devices as it can "snap-into" the STB. The Smartfoot™ allows consumers to receive individual IPTV services on multiple TVs in the house. An end user can view a movie in the living room while another watches a different channel in their bedroom, all via existing home cabling.

Advance Information: This document contains the target specifications for a product under development. Specifications may change in any manner without notice.



Main Features

- MPEG-4 AVC/H.264 up to HP@L4, resolutions up to 720p and 1080i
- MPEG-2 up to MP@HL, resolutions up to 720p and 1080i
- HD Graphics (1280x720)
- Digital HD output via HDMI with HDCP
- Analogue HD output: 720p, 1080i
- Picture in graphics support with scaling, positioning and Alpha Blending
- Flexible audio and video output
 - Composite, Component, S-Video, RGB
 - Stereo Audio and Dolby 5.1 surround via Optical S/P-DIF
 - Teletext pass through, closed captioning, subtitling
 - RF Modulator
 - 4:3 and 16:9 video stream aspect ratios
 - PAL/NTSC TV Output with Macrovision protection option
 - 16:9 video stream on a 4:3 TV with cropping/letterbox
- High performance integrated silicon architecture, 300 MIPs with dedicated codec support
- 192 Mbytes SDRAM as standard
- Interface to 10/100BaseT Ethernet
- USB 2.0 Peripheral Port
- Channel up/down buttons
- IR Remote Control for TV and set-top functions
- Protocols
 - VoD (RTSP video session control)
 - Multicast (IGMP)
- Key-protected, scalable multicast software uploading of Flash memory based software
- HTML 4 Browser with JavaScript
- Optional IR keyboard

Supported Middlewares

Amino STB products are supported by leading IPTV middleware providers for integration as part of a broadband TV solution. The AmiNET130 also supports development of applications in HTML and Javascript.

Content Security

The AmiNET130 is compatible with a wide range of leading content protection & rights management solutions.

Supported Browsers

For Internet access, and middleware compatibility, the AmiNET130 supports a variety of browsers including ANT and Opera.

Application Development

Amino software technology is based on open standards such as Linux and HTML. Application developers for the AmiNET130 benefit from the Amino JMACX system which enables full control of the STB functions from the browser. JMACX provides the service operator with a powerful set of HTML and JavaScript extensions which allow simple and highly effective user interface designs to be created or ported.

For increased flexibility in creating custom applications ADKs and SDKs are also available.

Software Update and Maintenance

The AmiNET130 holds a complete software image in on-board flash memory, and is also designed to support secure bootstrap from a multicast server. At any time, a deployed AmiNET130 can be upgraded with a new software image via the secure multicast server. The multicast approach ensures that very large numbers of deployed set-tops can be upgraded without placing an individual load on the server or the network. For security, software images can be signed with keys unique to each deployment.

Installation

The AmiNET130 is supplied an in-line power supply with a country-specific power cord, and a choice of video cable. An external ADSL or other modem is required for connection to the broadband network. Installer configuration is on-screen via internal HTML pages.

Detailed Specification

Outputs	HDMI, Composite, Component, RGB, S-Video, SCART, RF Modulator with loop-through Stereo & Digital Audio S/P-DIF Optical SD PAL or NTSC-M HD 720p and 1080i, USB 2.0 Master
Inputs	Ethernet 10/100 Base T
Graphics Resolution	640x576 (minimum) and HD 1280x720
Codecs	MPEG-2 MP@HL MPEG-4 AVC/H.264 HP@L4
Power	5V, 1500mA
Operating Environment	ETS 300-019-1-3 Class 3.1
EMC Conformance	EN55022. FCC Part 15
Safety Approvals	Safety certification to IEC 60065:2001, CAN/CSA-C22.2 No. 60065-03 and UL 6500

Accessories

Multi-function IR Remote	Standard
IR Keyboard	Optional
Power Supply with Regional Power Cord	Standard
SCART Cable	Optional
S-Video + Composite Cable (CVBS)	Optional
RGB Cable	Optional
Component Video Cable (YPbPr)	Optional
HDMI Cable	Optional
Anti-slip Base-plate	Standard
User Guide	Standard

Application Developer Kit

Complete documentation and support for the various APIs are available under a separate license agreement.

Multicast Loader

The Amino secure multicast server software ensures that any DHCP-configured Amino set-top (such as the AmiNET130) connecting to the network, may be rapidly and securely loaded with the latest signed software image authorised by the service provider. The multicast loader is installed on a Linux PC at the head-end, and transmits the software image in a continuous carousel, ensuring rapid start-up regardless of the number of set-tops in the system, it is therefore completely scalable.

