Digital Video Interfacing Products

AsiPod AT4USB

DVB-ASI input and output Small Pocket size No External Power Supply needed



Standard Features

- High Speed USB 2.0.
- Windows XP, Vista, Win 7 (64bit) Drivers + SDK.
- Linux Drivers & sample application.
- Accompanied by DVSStaion3, Alitronika's Integrated TS Player, Recorder & Real Time Quick Analyser Software.
- Supports DVB Standards A1010Rev1 and EN50083.
- Supports 188 /204 byte Packet Sizes. Input
- Integrated Loop Through output.
- Carrier and Lock Detection.
- Sync, Error & Code Violation Detection.
- Automatic Cable Equalization of up to 350m.
- Support for Time Stamping, PID filtering. **Output**
- Programmable Output Bit Rate.
- Null Packet Insertion by hardware.
- Selectable Burst size mode & continuous mode TS output.
- Hardware TS generation.

Application

Targeted for Digital Video Professionals, Sophisticated End Users and OEMs the AT4USB is an ideal solution for A number of applications such as:

- Development Tools.
- DVB to IP or IP to DVB Gateway.
- Transport Stream Recording.
- Transport Stream Playing.
- Transport Stream Analysing
- Transport Stream Monitoring.
- Video on Demand Server.
- Transport Stream Test Generator.
- High Speed Serial Data Link.



Specifications

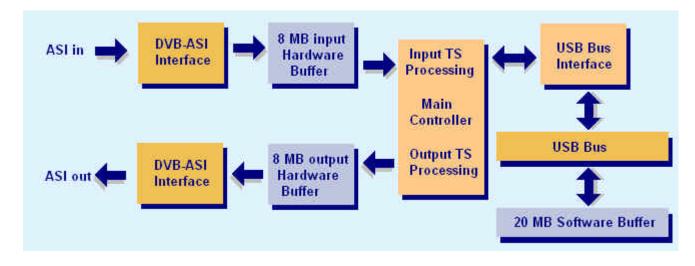
On Board Buffer: 8 Mbytes Serial Connectors: 75 Ohms BNC Input Return Loss: >15 dB Input Signal level: 800 mV +/- 10% Output Signal level: 1.0Vp-p nominal DVB-ASI I/O Bit Rate: 0 to 214 Mbit/s Bit Rate Stability: +/- 25ppm DVB-ASI I/O Clock: 270 MHz Size WxLxH: 80mmx50mmx20mm

A member of Alitronika's state of art digital video interfacing products.

The AT4USB is a USB based interface device suitable for Recording, Playing and Analyzing of DVB-ASI Transport Streams.

2 BLOCK DIAGRAM

FIG4 illustrates the block diagram of the AT4USB device. The device communicates with the PC via the USB interface device. On the input side, the serial data is de-serialized 8b/10b and de-coded before it is presented to PC via the USB controller device. On the output side, the MPEG-II transport streams enter the device via the USB interface device. The AT4USB then transmits the transport streams according to the settings provided by the application software. The data is 8b/10b encoded for DVB-ASI signals before it is serialized and transmitted via the BNC output connectors.



3 EXTERNAL INTERFACES

The external interfaces for the AT4USB are shown. There are two Mini BNC connectors for the Serial input and output of DVB-ASI and a mini USB for connection to USB port of the PCs. The unit is supplied with USB cable and adaptors BNC to Mini BNC.



The LED in the back of the unit function as follows:

OFF = Power is off/ device not activated

- Flashing (Red) = Play /Record not activated Error condition
- **ON** (Green) = Normal operating condition

In Record mode this LED indicates that a Carrier has been detected and the device has locked to incoming TS. In Play mode this LED indicates that the output section has valid TS (normal operating conditions).

4 APPLICATION

Targeted for digital video professionals, sophisticated end users and OEMs the AT4USB is an ideal solution for a number of applications such as, development tools, universal interface for MPEG-II Transport Stream Playing and recording, video on demand server, transport stream test generator, high speed serial data link, software based MPEGII decoders & encoders and many other applications.

5.1 - DVSStation3: All of Alitronika devices are supported by DVSStation3, Alitronika's **FREE** Transport Stream Player, Recorder, Analyser & converter application software. Please refer to DVSStation3 specification and User Manual on our website for more information about DVSStation3. Even better please download it from our website & try it out. It works in DEMO mode without any Alitronika devices.

		alitı				
Play R Ter_57	ecord 8.ts	🚰 Open				
■ Ter_578.ts 112.197.631 bytes Playtime: +/- 60.01sec Before first packet: 187 After last packet: 187 After last packet: 101 596735 packets Packet size: 188 Bit rate: 14,929,411 bps		Program Information	PID Information Pid list 0 PAT (15.08 Kb/s) 1 CAT (15.08 Kb/s) 1 CAT (15.08 Kb/s) 1 CAT (15.08 Kb/s) 1 B NIT (807.59 b/s) 4 17 SDT (1.88 Kb/s) 4 18 EIT (74.57 Kb/s) 6 20 (0.00 b/s) 6 21 MIP (24 2 Kb/s) 6 1010 PMT (15.08 Kb/s) 1011 PCR (3.68 Mb/s) 1011 PCR (3.68 Mb/s) 1012 Program (172.56 k 1013 Program (172.56 k 1013 Program (263.54 k ↔	Output Select	Bitrate Elie: 14929411 Qut: 14929411 Permux (Hw) Default Default Options Burstmode Size	Adaptions PCR + DTS/PTS TOT/TDT Continuity Tools Error insertio Sub Range
Play controls	LOC		Hext dit	Buffer size Lowlevel 6Mb Hardware 8Mb Software 10Mb		

Play Screen

Record Screen

Alitronika - DVSstation III (AT4USB)		
Device select Configuration Settings Working Register H	telp	
Play Record		
Program Information Program Information Pid Information Pid list @ DV Canvas/Ketnet Pid list	Kh/s)	Recording Size Hardware PID filter Seconds Enable PID Filtering MBytes Exclusive
	Kb/s) CRaw Data (b/s) Signal Info (Kb/s) Carrier Detect (b/s) Lock (b/s) Sync (172.72 Kb/ Bit rate [Mb/s] 14.929	100 PID Table Options I Loop through ✓ Pass Through ASI
a 1013 Program	(263.83 Kb/ → Data Errors 0 Sync Loss 0	Time Stamping
Record controls No errors detected	Goodies	Buffer Size
IN a errors detected Loop count: 3	Ts Bytes: 0 MB HexEdit Ts Time: 0.00 Viewer Disable Analyzer DVB over IP	Lowleval BMb Hardware BMb Software 10Mb

Video Viewer

Alitronika - DVSstation III (A vice select Configuration Settings	Working Register Help	onika	VideoPlay	NUMBER	
Play Record Program Information Program Progr	Pid Information Pid list ← O PAT (15.06 Kb/s) ← 1 CAT (15.06 Kb/s) ← 1 CAT (15.06 Kb/s) ← 17 SDT (6.32 Kb/s) ← 17 SDT (6.32 Kb/s) ← 18 EIT (1.49 Mb/s) ← 20 TDT/TDT (300.91 b/s) ← 21 F0.00 b/s) ← 21 F0.00 b/s) ← 21 SUffing (6.42 Mb/s) ← 32 Program (300.87 Kb/s) ← 33 Program (225.68 Kb/s) ← 34 Program (225.68 Xb/s) ← 34 Program (25.63 31 Kb/s) ← 34 Program (25.68 Xb/s) ← 34 Program (25.68 Xb/	Input Select DV8 SMPTE Raw Data Signal Info Carrier Detect Lock Sync Packet size Bit rate [Mb/s] Data Errors Sync Loss			
	No errors detected Ts Bytes: oop count 3 3 Ts Time: Disable		Pid: 1791 - SA s Analyzer VB over IP	utinu SMb	

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SMALL COMPANY, BIG IDEAS

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