Digital Video Interfacing Products

AT40USB

DVB-ASI input and output

Small Handheld size
No External Power Supply needed

Standard Features

- High Speed USB 2.0.
- Windows 2000 and XP Drivers.
- Accompanied by DVSStaion2, 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 AT40USB ***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

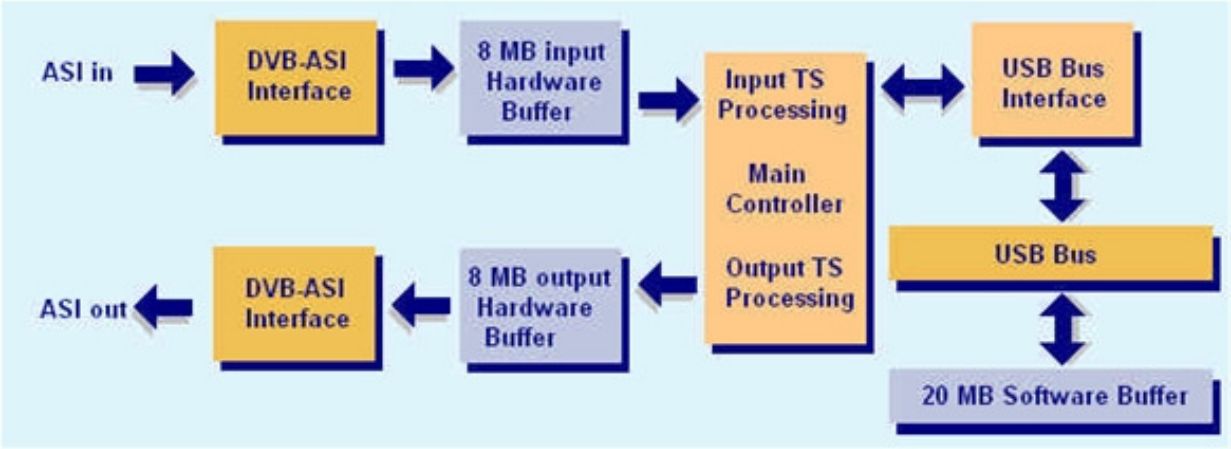
On Board Buffer: 8 Mbytes
Serial Connectors: 75 Ohms BNC
Input Return Loss: >15 dB
Input Signal level: 800 mV +/- 10%
Output Signal level: 1.0Vp-p nominal
DVB-ASI I/O Bit Rate: 0 to 214 Mbit/s
Bit Rate Stability: +/- 25ppm
DVB-ASI I/O Clock: 270 MHz
Size WxLxH: 120mmx100mmx30mm

1 GENERAL DESCRIPTION

The AT40USB 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 AT40USB 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 AT40USB 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 AT40USB are shown. There are two BNC connectors for the Serial input and output of DVB-ASI.
The three LEDs in front of the unit function as follows:

PWR - Top LED Power LED **ON** = Power is on
OFF = Power is off

CD - Middle LED Play/ Record LED **ON** = Device is Playing/Recording TS
Flashing = Play /Record not activated
In Record mode this LED indicates that a Carrier has been detected.
In Play mode this LED indicates that the output section has valid TS.

LCK - Bottom LED LOCK LED **ON** = Device is locked to TS
Flashing = No lock has been achieved
In Record mode this LED indicates that the device has locked into incoming TS.
In Play mode this LED indicates that the output section has locked into outgoing TS.

4 APPLICATIONS

Targeted for digital video professionals, sophisticated end users and OEMs the AT40USB 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.