Digital Video Interfacing Products

iMod-S（AT290USB）

◆DVB-S/S2;DVB-DSNG Modulator
◆IF & RF（L-Band）Outputs
◆DVB-ASI Input

Standard Features：

◎High Speed USB 2.0

◎Windows 2000, XP Drivers & SDK

◎Free DVSStation3 Alitronika's Application Software

◎Supports DVB According to Standard A1010 Rev1 & EN50083.

◎Modulation of Transport Stream files from Harddisk.

◎Modulation of TS from the ASI inputs.

◎All modulation processes are carried out by the hardware so that there is no load on the PC processor,

◎TPS flags to indicate TS contains MPE-FEC and/or Time slicing.

◎Supports Burst or continuous modes, 188 and 204 packet sizes.

◎Birate:

●UP To 72.574 MBit/s（DVB-S）

●UP To 200.385 MBit/s（DVB-S2）

◎Standards：EN300 421, EN301 210 & EN302 307

Application：

Targeted for Digital Video Professionals, Sophisticated End Users and OEMs, the iMod-S is an ideal solution for a number of applications such as:

◎Development Tools for DVB-S or DVB-S2 Receiver R&D.
◎IP to DVB Gateway.
◎DVB-S/S2 Transport Stream Generation.
◎Stand alone DVB-S or DVB-S2 signal generator for Test & Validation.
◎Demonstration and Trade Shows.
◎DVB-S/S2 output for OEM product.

Power Consumption & Size
◎Power Consumption:4Watts
◎Size LxWxH: 140mm x 130mm x 30mm

IF & RF Specifications:

◎IF Connector: 75 Ohms F-type
◎IF Output Frequency: 49-51or 99-101 MHz adjustable in 1Hz steps
◎IF Output Power over bandwidth: -10dBm
◎RF Connector: 75 Ohms F-Type
◎RF Output Frequency Range: 950MHz to 2150MHz.
◎RF Output Power over bandwidth: -10dBm to -35dBm,in 0.5dB steps
◎Symbol rate: up to 45 MSymbols/s
◎Spectral modes: inverted and non-inverted

DVB-S：
◎Alpha roll off: 0.35.
◎Modulation Modes: QPSK

◎FEC Code Rates: 1/2, 2/3, 3/4, 5/6 and 7/8

DVB-S2：
◎Alpha roll off: 0.20, 0.25 and 0.35
◎Modulation Modes: QPSK, 8SPK, 16APSK and 32APSK.

◎FEC Code Rates: 1/4,1/3,2/5,1/2,3/5,2/3,3/4,4/5,5/6,8/9 & 9/10

DVB-DSNG（Digital Satellite New Gathering)：
◎Modulation Modes:8PSK, QAM16

ASI Specifications:

◎On Board Buffer: 16Mbytes
◎DVB-ASI I/O Connectors: 75 Ohms BNC
◎DVB-ASI Signal level: 1.0Vp-p nominal
◎DVB-ASI I/O Clock: 270 MHz
◎DVB-ASI Input return loss: 15dB.
◎DVB-ASI I/O Bit Rate: 0 to Max Mbit/s*.
* Max Mbit/s = Maximum bit rate allowable by DVB-S; DVB-S2 modulation.

iMod: Modulating at any where & any way!

Similar Products：

AT2900P/S
●DVB-S/S2; DVB-DSNG Modulator
●IF&RF(L-Band) Output
●DVB-ASI/SPI Input
●DVB-ASI Monitor Output

AT2900U/S
●DVB-S/S2; DVB-DSNG Modulator
●IF&RF(L-Band) Output
●DVB-ASI/SPI Input
●DVB-ASI Monitor Output

1. GENERAL DESCRIPTION

A member of Alitronika's state of art digital video interfacing products.
The iMod-S is a USB based interface device suitable for DVB-S/S2 Transport Stream Generation and IF as well as full range L-band up conversion.

2. BLOCK DIAGRAM

The figure below illustrates the block diagram of the iMod-T device. The device communicates with the PC via the USB interface device. The iMod-T is capable of modulating a DVB-S/S2 & DVB-DSNG TS from the harddisk of the PC or from the incoming DVB-ASI input. The modulated DVB-S/S2 & DVB-DSNG is available on both IF and RF outputs a. The modulation options, output frequencies and all other setting are done with the help of DVSStation3.
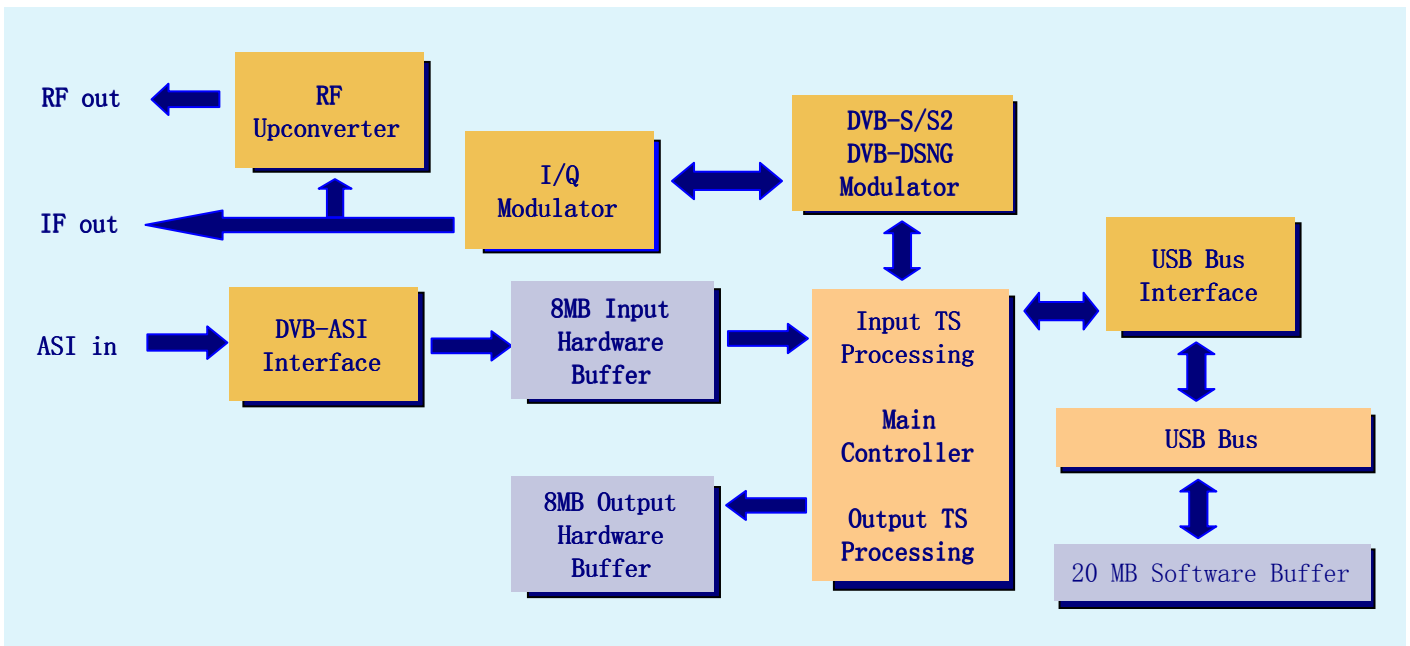
3. EXTERNAL INTERFACES

The external interfaces for the iMod-S are shown. There are 3 BNC connectors for the RF & IF Output & DVB-ASI Input,as well as USB and DC power inlet connectors.
The Unit is supplied with power supply and USB2.0 cable.

The 3 LEDs on the Front of the unit functions as:

Power: **Power LED**   **ON=** Power is on

                                          OFF= Power is off

Status1:   **ON=**

                                          Flashing=

Status2:   **ON=**

                                          Flashing=

4. APPLICATION

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