NOTE 5

ASI4336/ASI4346 RS422 Bitstream Input

1. Introduction

This application note details how to utilize the RS422 satellite bitstream input on the ASI4336 adapter.

Typically, the RS422 satellite bitstream input would be used to record an MPEG-I layer 2 compressed audio bitstream to a PC harddrive for later playback.

2. Hardware Configuration

The ASI4336 breakout cable (part ASI1301) has the following RS422 signals available:
Data+,Data-
Clk+,Clk-

These signals should be connected to a suitable RS422 data source.

3. Software configuration

The default settings for the data and clk polarities should work for most applications. If there is a need to change the polarity, use the ASI Mixer Application to change the settings of the “Data” and “Clk Edge” controls on the “RS422 In 1” line.

4. Recording from the RS422 bitstream

Recording the RS422 bitstream requires an application that allows the user to select the wave input device to use. The RS422 input presents itself as an additional Wave In device (labelled “1 – ASI4336 /2 Bitstream” on a ASI4336) and therefore supports the standard Microsoft waveIn() calls.

Assuming an MPEG source, the application would setup the samplerate and bitrate as if recording from a line in. For example the application would call waveInOpen with the waveformat structure filled out with format=MPEG LayerII, samplerate=44100Hz and bitrate=256kbs. Note, that incorrect specification of the samplerate and bitrate will result in incorrect timing information being reported by the driver.

At the HPI programming level an application can record any bitstream from the RS422 input using the format HPI_FORMAT_RAW_BITSTREAM.

The Windows driver supports the recording of an unknown RS422 bit format using the ASI_WAVE_FORMAT_RAW_BITSTREAM format (see asiwavx.h distributed with the ASI Multimedia driver).

[end]