

TVB590

DTV Modulator PCI Card



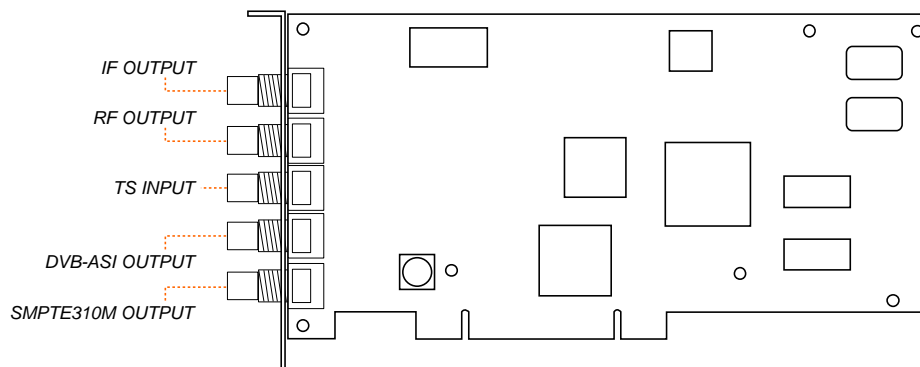
Overview

The digital streaming DTV modulator PCI card can play MPEG stream from hard disk and DVB-ASI/SMPTE-310M input into on-air signal. The output can be industry standard 55~956 MHz and 956~2150MHz selectable RF signal. On board synthesizer can generate stable and accurate symbol clock and tuning frequency. The transport stream can be supplied through PCI bus interface and DVB-ASI/SMPTE-310M input.

Features

- Transport stream from hard drive thru PCI interface and DVB-ASI/SMPTE-310M input
- DVB-ASI, SMPTE-310M output for monitoring
- On board VHF/UHF/L-BAND RF output up-converter
- Programmable RF output level (0.1dB step)
- Superposition white noise over modulated signal and control the output C/N ratio
- SDK for Windows 2000/XP/VISTA 32bit and Linux
- DVB-T/DVB-H, ATSC 8VSB, QAM, DVB-S/DVB-S2, T-DMB, ISDB-T, DTMB modulation option available
- Free 0dBm amplifier option

Board View



Board Specifications

Transport Stream Input From Hard disk Thru PCI Bit Rate Up to 90Mbits/s ASI/SMPTE-310M Input/Output Connector: 75ohm BNC IF Output Connector: 75ohm BNC Freq: 36 MHz/44 MHz selectable Level: -15dBm max(@36/44MHz)	RF Output Connector : 75ohm BNC Freq : VHF/UHF 55~956MHz, L-BAND 956~2150MHz Level : VHF/UHF 0dBm max L-BAND -20dBm max Freq accuracy: +/-5KHz max Attenuation step: 0.1dB Phase noise <-90dBc/Hz @ 10KHz RF step size: 100KHz step(except for TDMB, TDMB: 8KHz step)	PCI Bus PCI version 2.1 compliant Physical/Environmental HxWxL: 25mm x 107mm x 210mm Driver Windows XP, 2000,VISTA 32bit WDM and Linux Application Software Televue made GUI Operating Condition Temperature: 0~45°C Humidity: 0~85%
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DVB-T/H Option Specifications

Standard ETSI EN300744 v1-4-1 compliant Non-hierarchical single program mode Punctured Code Rate 1/2, 2/3, 3/4, 5/6, 7/8 selectable Constellation QPSK, 16-QAM, 64-QAM	Transmission Mode 2K/4K/8K mode selectable 4K mode only for DVB-H Guard Interval 1/4, 1/8, 1/16, 1/32 selectable	In-Depth Interleaving Only for DVB-H Bandwidth 5/6/7/8MHz mode selectable 5MHz only for DVB-H
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8VSB Option Specifications

Standard ATSC A.53, 8VSB compliant		
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QAM Option Specifications

Standard ITU-T J.83 Annex A/C and B compatible	Constellations Annex A/C: 16-QAM, 32-QAM, 64-QAM, 128-QAM,256-QAM	Annex B :64-QAM, 256-QAM
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DVB-S Option Specifications

Standard ETSI EN 300421 (DVB-S) compliant	Code Rate 1/2, 2/3, 3/4, 5/6, 7/8	Symbol Rate 1~45M symbols/s DC Blocking Voltage 50V max
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DVB-S2 Option Specifications

Standard ETS 302 307 compliant LDPC Code 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, and 9/10 supports	Modulation Mode QPSK, 8PSK, 16APSK, 32APSK Baseband Shaping Filter Roll-off 0.20, 0.25, 0.35, none selectable	Symbol Rate 2~45Msps w/o shaping filter 2~22Msps w/ shaping filter DC Blocking Voltage 50V max
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T-DMB Option Specifications

Standard ETS 300401, ETS300799 compliant Transmission Mode DAB transmission modes I, II, III, IV	- Transmission mode automatically selected from the ETI stream	Supports ETI(NI) and ETI(NA) file format *T-DMB modulation from TS input is not supported
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ISDB-T Option Specifications

Standard ARIB STD-B31 v1.6 compliant Mode Mode I, Mode II, Mode III Code Rate 1/2, 2/3, 3/4, 5/6, 7/8 selectable Mapping DQPSK, QPSK, 16QAM, 64QAM	Guard Interval 1/4, 1/8, 1/16, 1/32 Timing Interleaving Length Mode I - 0, 4, 8, 16 Mode II - 0, 2, 4, 8 Mode III - 0, 1, 2, 4	The Number of Segment 1 / 13 Segment Support TMCC Information and Generation (ISDB-T information and IIP) *ISDB-T modulation from DVB-ASI input is not supported
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DTMB Option Specifications

Standard GB20600-2006 compliant Number of Carrier 1 or 3780 sub-carriers selectable Frame Length 4200, 4335, 4725 symbols	Constellation 4QAM-NR, 4QAM, 16QAM, 32QAM, 64QAM Code Rate 0.4, 0.6, 0.8	Time Interleaving 240, 720 symbols Bandwidth 8MHz
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