



Features

- Drop-in module for Virtex-5™, Virtex-4™ and Spartan™-3A_DSP FPGAs
- 1 SPI input / 2 SPI outputs
- Converts an MPEG TS mux rate into 2 independent MPEG TS mux rates
- Management of PSI/SI tables (automatic tables generator) according to ETS300 468 and ISO 13818-1
- Configurable via a RS232 link
- Service filtering and insertion
- Full PCR re-stamping
- External or internal output mux rate
- Statistical service in bandwidth estimation
- Optimize output mux rate thanks to smoothing FIFO
- Smoothing FIFO is implemented as block RAM (no need of external component)
- Configurable size of the smoothing FIFO
- Full synthesizable RTL design (not delivered) for easy customization
- Netlist version available for ISE 10 and later versions

Applications

DVB remultiplexer 1 to 2 may be used in applications related to transmodulation.

Description

The DVB remultiplexer 1 to 2 core is a drop-in module for reducing the MPEG TS rate by filtering services selected by an external host controller.

The remultiplexer is managed by an external host via the RS232 link. The host is in charge to read the statistical data and to select the services to filter.

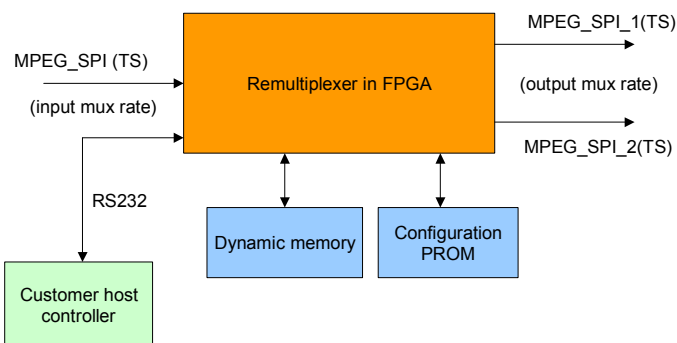
Generation of a new NIT follows 3 possibilities :

- pass through of the current NIT
- new one provided by the host
- autogeneration of a simple one with channel numbering

Regeneration of PSI/SI tables PAT and SDT independtly of the output.

Large smoothing FIFO to optimize the bandwidth of the output rate.

Complete application fits into Spartan3 1800A_DSP.



Ordering information and related cores

Parameters	Memory type	Designation
BRAM	SDRAM	MVD_REMUX_1to2_NET

VHDL source code : can be delivered as an option under NDA and other specific clauses

Related cores : Cable Modulator J83B, DVB-C, DVB-S and/or DVB-T/H cores contact us at info_cores@mvd-fpga.com

Documentation and support : Datasheet and user's guide. In addition MVD can provide on site or remote coaching.