Odin TeleSystems Inc.

Open Telecom for Open Minds

The RTP Bridge is a universal streaming media gateway application on the top of TDM (E1/T1) and RTP media streams designed for the industry's award-winning Odin Telecom frameworX (OTX) hardware.

The RTP Bridge solution provides data transfer between various E1/T1 timeslots and RTP end-points in simplex or duplex directions. Voice data could be additionally transcoded between G.711 (a-law, u-law)/ G.711.1/G.711.2 E1/T1 timeslots and RTP end-points (G.711, G.723, G.726, G.729, G.722/G.722.1/G.722.2 AMR-WB)) in any order.

The RTP Bridge is targeted to use DaVinci[™]enabled products of Odin TeleSystems like Alvis-CSI, Alvis-PCIe, Alvis-ASM. It runs on the embedded TI DM6443 SoC processor of these products.

The RTP Bridge uses the OtxRtp Library on the DM6443 SoC ARM core. The OtxRtp Library is also available for Windows and Linux Operating Systems.

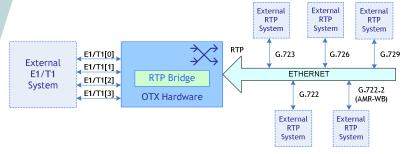
The RTP Bridge application uses a Telnet interface for real-time control. Common controls are connections, disconnections, status monitoring, etc. Connections can also be configured from a configuration file at startup.

The RTP Bridge application powered by the OTX Alvis products can successfully compete with x86 servers equipped by E1/T1 interface boards.

The RTP Bridge makes it a breeze to join the RTP world with the TDM world.

Codec	Number of enc. channels	Number of dec. channels
G.723	63	318
G.726	32	39
G.729	63	188

RTP Bridge



Feature Highlights

- Simultaneous bi-directional data transfer between E1/T1 spans and various RTP remote nodes.
- DSP C64x+ powered transcoding of voice data between any of G.711 (a-law, ulaw)/G.711.1/G.711.2, G.723, G.726, G.729, G.722/ G.722.1/G.722.2 (AMR-WB) codecs.
- Integrated SNMP monitoring using the OtxSNMP Library (SNMP Layer1) and LED Alarms indication.
- DSP C64+ powered built-in configurable jitter buffer of incoming RTP packets.
- Real-time statistics for RTP sessions.

- TDM passive monitoring provides the ability to stream E1/ T1 spans to the RTP endpoints in a non-intrusive mode.
- Optimized data processing using multi-core DaVinci[™] architecture with offloading of all real-time operations on the powerful C64+ DSP core.
- Support for Multi-party conferences.
- Easy customization of specific requirements.
- Supports IETF RFC 3550, RFC 3551 RTP/RTCP Transport protocols.
- Compatible with the OTX XDM SDK API.

RTP Bridge Product Brief

Hardware and Software Specifications		
The RTP Bridge is supported by the following oper- ating systems platforms:	• ARM Linux kernel-2.6	
The RTP Bridge can be configured to run with the following Odin TeleSystems' board combinations:	 Alvis-0-CSI: 1 Ethernet port + 1 USB Alvis-2-CSI: 2 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB Alvis-4-CSI: 4 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB Alvis-4M-CSI: 4 E1/T1 receivers + 1 Ethernet + 1 USB Alvis-8-CSI: 8 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB Alvis-8M-CSI: 8 E1/T1 receivers + 1 Ethernet + 1 USB Alvis-ASM 	
Features		
	 Simultaneous bi-directional data transfer between E1/T1 spans and various RTP remote nodes. DSP C64x+ powered transcoding of voice data between G.711 (a-law, u-law)/G.711.1/G.711.2, G.723, G.726, G.729, G.722/G.722.1/G.722.2 (AMR-WB) codecs. Multi-party conferences support. Integrated SNMP monitoring using the OtxSNMP Library (SNMP Layer1) and LED Alarms indication. Optimized data processing using multi-core DaVinci™ architecture with offloading of all real-time operations on the powerful C64+ DSP core. Supports IETF RFC 3550, RFC 3551 RTP/RTCP Transport protocols. Compatible with the OTX XDM SDK API. 	
Other features		
	 A variety of optional decoding / encoding plugins are available (ATM/AAL5, HDLC/SS7, TRAU, H.324M). Multi-session mode; the user can create any numbers of listening ports on one system. Real-time statistics for RTP sessions is available. Customizable RTP streams parameters: packetizing time, packet size, adjustable codec parameters, etc Optimized RTP monitoring mode allows to listen RTP streams coming with different IP-addresses and ports. 	
Ordering Information		
Product Name / Product Category	• RTP Bridge / SAA-1020-1	
Contact Information		
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