

## Alvis-PCIe as an Asterisk Voice/Video Transcoding Accelerator

Compatible TI DSP: DM644x

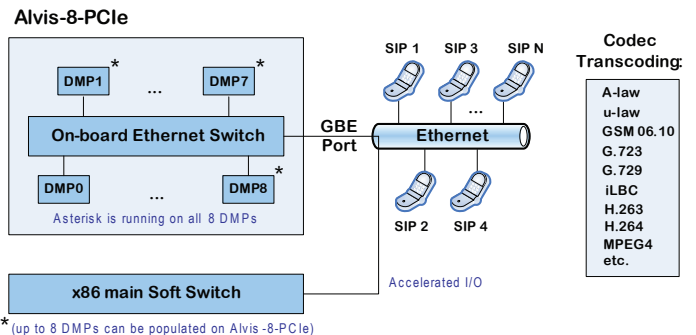
A system running Asterisk would often need to convert voice and video data from one codec to another (transcoding). This can be a very process intensive task and a limiting factor on a multi-channel Asterisk system. So to reduce the processor load of an Asterisk system Odin TeleSystems offers the Asterisk Voice/Video Transcoding Accelerator solution which is based on the Alvis-8-PCIe board. In this solution Digital Media Processors (DMPs) on the Alvis-8-PCIe board handles the resource-intensive transcoding operation thus reducing the processor load of the system as a whole.

### FEATURES & BENEFITS

- ◆ Hardware acceleration of voice and video transcoding operations: the transcoding operation is off-loaded to the powerful DSP C64x core (4700 MIPS) of a TI DaVinci DMP instead of being carried out by the main host CPU.
- ◆ Increases the system capability by running a large number of transcoding channels simultaneously among the DaVinci DMPs on an Alvis-8-PCI (up to 300 channels per DMP).
- ◆ Provides a flexible architecture: an existing Asterisk system can run more channels and can be connected to the same SIP and IAX trunks while the host system processor will not be overloaded by transcoding voice channels.
- ◆ Delivered with pre-installed and pre-configured vocoders (G.723, G.729, etc.)
- ◆ Scalability: each Alvis-8-PCIe boards can be populated with 1 to 8 DMPs. With 8 DMPs populated the board can handle up to 2400 channels. If more processing capacity is needed, several Alvis-PCI boards can be placed in the PC. The only limit is the number of PCIe slots in the PC. E.g. four Alvis-8-PCIe boards can simultaneously support up to 9600 channels!



- ◆ Reliability: support for SNMP traps and hardware watchdog, which increases the reliability of the system by reporting possible problems to a remote system.
- ◆ Increases the reliability of the system by providing dynamic load balancing between active DMP processors.
- ◆ Transcoding data is sent and received through the GB Ethernet port of the Alvis-8-PCI board (via SIP).



### CONTACT INFORMATION



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