



Odin TeleSystems Inc.

*Open Telecom for
Open Minds*

Odin TeleSystems introduced the Alvis product family to provide the ultimate industry solution for voice (VoIP) and video streaming applications (TVoIP) essential for soft-switch systems, media gateways and transcoding applications.

The Alvis-CSI is a complete stand-alone processing system in a compact desktop or wall-mountable unit. The product is available with or without E1/T1 interfaces. The Ethernet-only version can be used for router, soft-switch, and trans-coding applications. The Dual, Quad, or Octal E1/T1 version can be used for media gateway applications (PRI VoIP), T1/T1link extensions (TDMoP/E) and T1/E1 recording systems.

The Alvis-CSI (Complete Solution Integration) is based on Texas Instruments' dual core DaVinci TMS320DM6443 Digital Media processor. This processor provides an astonishing amount of processing power which facilitates encoding and decoding of numerous simultaneous channels.

The dual core processor on the Alvis-CSI consists of one ARM9 core and one DSP C64x+ core. For optimum performance, the work load is split between the two cores. The ARM core runs the MontaVista Linux operating system and handles higher layer stacks like Session Initiation Protocol (SIP) and TCP/IP. The DSP core runs DSP/BIOS (xDM codecs) and handles all real-time encoding/decoding operations.

The open architecture and the small footprint of the Alvis-CSI provides system designers with the horsepower needed to build a very powerful soft-switch or media gateway application, yet providing full flexibility for customization.


Alvis-CSI



Feature Highlights

- One Texas Instruments TMS320DM6443 dual core processor with 4752 DSP MIPS and 297 MHz ARM9 processing power
- 256 MB DDR2 memory
- 128 MB NAND shared flash memory
- 2 GB SD-card memory
- Zero, Four or Eight T1/E1 interfaces.
- Includes support for most popular VoIP and Video algorithms like G.723, G.729, DTMF, etc. Other encoders and decoders like AMR WB/NB, H.264, H.263, G.728, G.726, Echo cancellation /VAD, etc can be supported through third-party vendors
- MontaVista Linux on ARM-core
- DSP/BIOS & Codec Engine Framework on DSP-core
- 10/100 Ethernet port for data transfer and remote access
- Serial ports for debugging and application development
- Web interface for simple configuration and status verification
- USB 2.0 port
- Supports standard OTX DSP API for customized DSP applications.
- Compatibility with TI xDM (XDAIS) specification
- OTX CodecEngine Servers for common SPM

Alvis-CSI Product Brief

Applications			
<i>Provides applications capabilities for the following, plus others:</i>	<ul style="list-style-type: none"> VoIP and TVoIP Media Gateway Transcoders Soft-switch 		
Technical Specifications			
<i>Board Connectors</i>	<ul style="list-style-type: none"> One RJ-45 10/100 Ethernet connector Zero, 2, 4, or 8 E1/T1 RJ-45 connectors Serial port connector USB connector 		
<i>Data Interfaces</i>	<ul style="list-style-type: none"> 10/100 Ethernet interface USB 2.0 interface 4 or 8 T1/J1 or E1 interfaces with software switchable line termination (High-Z, 75 Ohm and 100/120 Ohm) (except for HAA-1082-1) 		
<i>T1/E1 Frame Formats (HAA-1082-2 only)</i>	<ul style="list-style-type: none"> Doubleframe, CRC Multiframe (E1 mode) F4, SF (or D4), ESF (or F24), SLC96 (T1/J1 mode) 		
<i>T1/E1/J1 Line Codes (HAA-1082-2 only)</i>	<ul style="list-style-type: none"> HDB3, B8ZS, AMI, AMI with ZCS 		
<i>DSP core and ARM9 Resources</i>	<ul style="list-style-type: none"> DSP Core: 4752 MIPS (C64x+) ARM9 Core: 297 MHz 		
<i>Memory</i>	<ul style="list-style-type: none"> 256 MB SDRAM (shared by DSP and ARM9 cores) 128 MB Flash memory and 2GB SD-card 		
<i>Programming Interface</i>	<ul style="list-style-type: none"> OTX DSP API (for custom DSP core software) OTX HW API (for controlling software) Montavista Linux tools 		
<i>Debugging Interface</i>	<ul style="list-style-type: none"> Serial port connection allows full access to ARM9 core 		
<i>Physical Dimensions</i>	<ul style="list-style-type: none"> 5" x 7" (1.75" height). Key-hole mount or desktop option (bumper pads) on the back side 19" x 8" (1.75" height). Rack-mount version is also available. <p>The metal case can fit 1 or 2 Alvis-CSI units.</p> 		
<i>Power Requirements/Environmental Data</i>	<ul style="list-style-type: none"> Power (5V) is supplied via external power supply (110 - 230 VAC) Power consumption: 3.3W with no USB devices connected Temperature: <u>operating</u>, 0° C to +50° C; <u>non-operating</u>, -40° C to +60° C Humidity: <u>operating</u>, 5% to 80% RH (%relative humidity) at up to +30° C, and 5% to 30% RH above +30° C up to +50° C non-condensing; <u>non-operating</u>, 5% to 80% RH at up to +30° C, and 5% to 30% RH above +30° C up to +50° C non-condensing Altitude: <u>operating</u>, up to 4,600 meters (15,333 feet); <u>non-operating</u>, up to 12,192 meters (50,000 feet) 		
Ordering Information			
<i>Product Name/Product Category</i>	<p>Alvis-0-CSI: HAA-1082-1 (1 Ethernet ports + 1 USB) Alvis-2-CSI: HAA-1082-6 (2 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB) Alvis-4-CSI: HAA-1082-4 (4 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB) Alvis-4M-CSI: HAA-1082-5 (4 E1/T1 receivers + 1 Ethernet + 1 USB) Alvis-8-CSI: HAA-1082-2 (8 E1/T1s (both transmit and receive) + 1 Ethernet + 1 USB) Alvis-8M-CSI: HAA-1082-3 (8 E1/T1 receivers + 1 Ethernet + 1 USB)</p>		
Contact Information			
<i>For more information on the Alvis-CSI products, please contact:</i>	<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;"> Odin TeleSystems Inc. 800 E. Campbell Road, Suite 334 Richardson, TX 75081-1873 USA </td> <td style="width: 40%; vertical-align: top;"> Tel: +1-972-664-0100 Tel: 1-888-ODINTSM Fax: +1-972-664-0855 Email: info@odinTS.com Web: www.odinTS.com </td> </tr> </table>	Odin TeleSystems Inc. 800 E. Campbell Road, Suite 334 Richardson, TX 75081-1873 USA	Tel: +1-972-664-0100 Tel: 1-888-ODINTSM Fax: +1-972-664-0855 Email: info@odinTS.com Web: www.odinTS.com
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