Odin TeleSystems Inc.

Open Telecom for Open Minds

Vidar-5x4-ASM (EX, CST and PRO) and Vidar-55x4-ASM

The Odin Telecom frameworX (OTX) family of industry award-winning products represents outstanding cost/performance value for today's service providers and telecom equipment manufacturers. Leading this product line for a variety of voice and data applications are the Vidar-5x4-ASM (EX, CST and PRO) and Vidar-55x4-ASM daughter boards.

The Vidar products can be attached to network interface cards within the OTX adapter family, providing powerful DSP resources. Whether you need reliable tone generation and detection, or voice/data encoding and decoding, or dependable HDLC signaling, the Vidar-ASM daughter boards deliver exceptional results.

And for the more powerful processing required for VoIP applications and data programming and storage, the Vidar-55x4-ASM commands a full 1600 MIPS performance factor through its leading-edge Texas Instruments DSPs.

Vidar-5x4-ASM-CST contains the most popular telephony algorithms like the G.726 ADPCM Codec, G.168 line echo canceller, Automatic gain control and other telephony algorithms.

Both Vidar-5x4-ASM-EX and Vidar-5x4-ASM-PRO offer a total of 640 MIPS of processing power each.

So for the best in DSP resourcing and Internet telephony application capability, the Vidar-5x4-ASM (Ex, CST and Pro) and Vidar-55x4-ASM deliver true value and top performance.

Vidar-5x4-ASM and Vidar-55x4-ASM Daughterboards for OTX Adapters

Feature Highlights

- 4 Texas Instruments TMS320VC5510 DSPs with 400 MIPS processing power each (Vidar-55x4-ASM)
- 4 Texas Instruments TMS320C54CST DSPs with 120 MIPS processing power each (Vidar-5x4-ASM-CST)
- 16 MB (8 MWords) external SDRAM memory per DSP (Vidar-55x4-ASM)
- 128KB (64 KWords) external SDRAM per DSP (Vidar-EX/PRO)
- Vidar-5x4-ASM-CST contains the most popular telephony algorithms like G.726 ADPCM, G.168 line echo canceller, DTMF, VAD, CNG, AGC etc..
- 4 Texas Instruments TMS320C5410A DSPs with 160 MIPS of processing power each (Vidar-5x4-ASM-EX)
- 4 Texas Instruments TMS320C5416 DSPs with 160 MIPS of processing power each (Vidar-5x4-ASM-PRO)
- Odin ASM (application specific module) interface:
  - ⇒ Data: 4 PCM highways
  - ⇒ Control: 16-bit processor bus

Vidar-5x4-ASM(EX, CST, PRO) and Vidar-55x4-ASM Product Brief

Applications	
Provides applications capabilities for the following, plus others:	• Tone generation/detection • Voice/data encoding/decoding • HDLC signaling • VoIP (Vidar-55x4-ASM/Vidar-CST-ASM)
Technical Specifications	
Board Connector	• Odin ASM interface • Two 2x70 board stack connectors
Data Interface	• 4 x 2/4/8 Mbit/s PCM highways switchable in the time-space switch of the host board
Control Interface	• Odin ASM 16-bit processor bus. Memory mapped to the host
DSP Resources	• Vidar-5x4-ASM-EX: 4 x TI TMS320C5410A; 160 MIPS processing power each • Vidar-5x4-ASM-CST: 4 x TI TMS320C54CST; 120 MIPS processing power each • Vidar-5x4-ASM-PRO: 4 x TI TMS320C5416; 160 MIPS processing power each • Vidar-55x4-ASM: 4 x TI TMS320VC5510; 400 MIPS processing power each
DSP Memory	• Vidar-5x4-ASM-EX: 64 Kword internal RAM and 128KB external per DSP • Vidar-5x4-ASM-CST: 40 Kword internal RAM and 128KB external per DSP • Vidar-5x4-ASM-PRO: 128 Kword internal RAM and 128KB external per DSP • Vidar-55x4-ASM: 160 Kword internal RAM per DSP and 16MB external SDRAM per DSP
DSP Programming Interface	• Texas Instruments C and C++ Compiler, Assembler, Linker • Texas Instruments Code Composer Studio debugger
Debugging Interface	• JTAG connection on host card, which allows connectivity to standard third-party emulator cards
Power Requirements/Environmental Data	• Power consumption: 2.2W • Temperature: operating, 0° C to +50° C; non-operating, -40° C to +60° C • Humidity: operating, 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; non-operating, 5% to 80% RH at up to +30° C, and 5% to 30% RH above +30° C up to +50° C non-condensing • Altitude: operating, up to 4,600 meters (15,333 feet); non-operating, up to 12,192 meters (50,000 feet)
Ordering Information	
Product Name/Product Category	Vidar-5x4-ASM-EX/HAA-1056-1-1.0 Vidar-5x4-ASM-CST/HAA-1054-1-1.0 Vidar-5x4-ASM-PRO/HAA-1061-1-1.0 Vidar-55x4-ASM/HAA-1045-1-1.0
Contact Information	
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