



# **VXI110 Differential/Single-Ended TTL Interface for VXI**

## **Features**

- 192 Channel Differential TTL / TLL interface
- 50MHz transfer rate
- Six user loadable FPGAs for automated data processing
- Single slot VXI form factor
- 32-bit VXI/VME bus interface
- Integrated over-voltage protection on all lines

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## Summary

Phillips' VXI110 configurable Differential TTL /TTL module interface card is an intelligent digital interface capable of supporting development and validation testing. The VXI110 has 6 on-board field programmable gate arrays (FPGAs) to support bus emulation, protocol simulation, test algorithm generation and other data conversion functions.

The user can configure (on-the-fly) the direction and type of I/O for each pin. Two pins can operate independently as single-ended TTL I/O or together as a true differential TTL I/O high speed pair.

The VXI110's six ACEX1K100s have capacity and memory to support complex operations decoupled from the VXI bus. This allows the VXI110 to operate at high speed without being interrupted by the host controller.

The user can program the FPGAs through the VXI interface, or via on-board EPROM so the board is automatically loaded. Example FPGA code and driver source code are provided with the VXI110.

The VXI110 has a VME32 compatibility mode that allows high speed operation with a VME style real-time host controller instead of a VXI host controller.

Custom versions of the VXI110 are available to our customers. Please contact the factory for further information.

#### **Specifications**

Channels:	192 user-defined I/O, direction control for each, two I/O can be combined to operate as a differential pair
Clock Rate:	50MHz max
Output:	H>2V into 500hms, L<0.2V
	Sink 20mA
	Source 20mA
Input:	H>2V, L<0.8V
Termination:	120Ω (differential mode)
OVP:	Transient suppression on all lines
Clocks:	On-board crystal, DDS
FPGA:	ACEX1K100
Connectors:	Six VHDCI 68-pin female connectors
Power:	+5V @ 6.0A max

### **Ordering Information**

Hardware 335-4113

VXI110 192 channel differential TTL / TTL 335-4112

VXI110 128 channel differential TTL / TTL 335-4111

VXI110 64 channel differential TTL / TTL

Software

VXI-API-QNX

QNX® software support package

VXI-API-WIN

Windows<sup>®</sup> DLL software package

#### Accessories

**TP-DIN68S** Termination panel, VHDCI receptacle CBSCSI-6803MM

Cable, shielded, 3-ft, VHDCI plug at both ends