

- 16 optically coupled inputs
- High isolation potential
 - 1.5 kV sustained
- 500 V galvanic isolation (channel-to-channel)*
- 8-, 16-, and 32-bit data transfers
- Voltage sensing or contact sensing inputs*
- Input ranges of 5 to 125 VDC
- Complies with PCI local bus specification
- Complies with CompactPCI® specification
- Single CompactPCI slot
- VMISFT-9450 software driver available for:
 - Windows NT®
 - VxWorks
 - QNX
 - Linux

FUNCTIONAL CHARACTERISTICS

Board Function: This board has 16 optically coupled inputs. The inputs provide a sustained 1.5 kV of system isolation to the CompactPCI bus backplane.

Compliance: This board complies with the PCI Local Bus Specification Revision 2.1 and CompactPCI Specification 2.0 R2.1

Addressing Scheme: The VMICPCI-1335 board address is assigned by the System BIOS per the PCI specification.

INPUT CHARACTERISTICS

Input Configuration: The inputs can be voltage sensing or contact sensing. Voltage sensing or contact sensing may be set on byte boundaries. External voltage may be injected on byte boundaries to supply power for contact sensing mode.

Input Voltage Options: The input voltage range is a manufacturing option. The available ranges are 5, 12, 24 to 28, 48, and 125 V. See Table 1 for more detailed information and please refer to the Ordering Options.

Input Isolation: 10 MΩ, minimum

Isolation Voltage¹: 1,500 V sustained

500 V sustained channel-to-channel maximum (in voltage sensing option only)

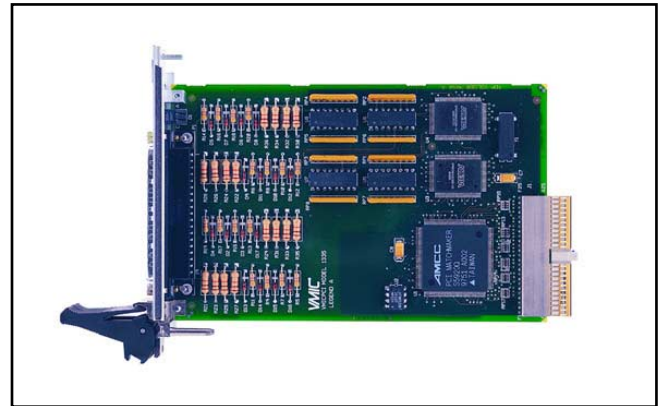
Contact Debounce: User-programmable debounce is available. Debounce times are .001, .128, .256, .512, 3.07, 6.14, 9.22, and 12.29 ms. Debounce defaults to .001 ms on reset.

Input Response Time: 15 μs, maximum

PHYSICAL/ENVIRONMENTAL

Dimensions: CompactPCI board size 3U, 100 by 160 mm.

User Connectors: One 37-pin male D-shell connector



Ambient Temperature: 0 to +65 °C, operating
-40 to +85 °C, storage

Humidity: 20 to 80 percent, noncondensing

Cooling: 50 LFM minimum air flow

Power Requirements: +5 VDC at 1.5 A

MTBF: 391,435 hours (217F)

TRADEMARKS

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Ordering Options							
December 16, 1999 800-651335-000 B	A	B	C	-	D	E	F
VMICPCI-1335	-			-			
A = Input Voltage Range 0 = 5 VDC 1 = 12 VDC 2 = 24 to 28 VDC 3 = 48 VDC 4 = 125 VDC B = Front Panel Option 0 = 3U Board Slot (Single Height) 1 = 6U Board Slot (Double Height) C = Input Configuration 0 = Voltage Sensing Inputs 1 = Contact Sensing *							
Note							
* Contact Sensing maintains byte-to-byte isolation only.							
Connector Data							
Compatible Cable Connector: Standard Subminiature "D" 37-pin male connector.							
For Ordering Information, Call: 1-800-322-3616 or 1-256-880-0444 • FAX (256) 882-0859 E-mail: info@vmic.com Web Address: www.vmic.com Copyright © April 1997 by VMIC Specifications subject to change without notice.							

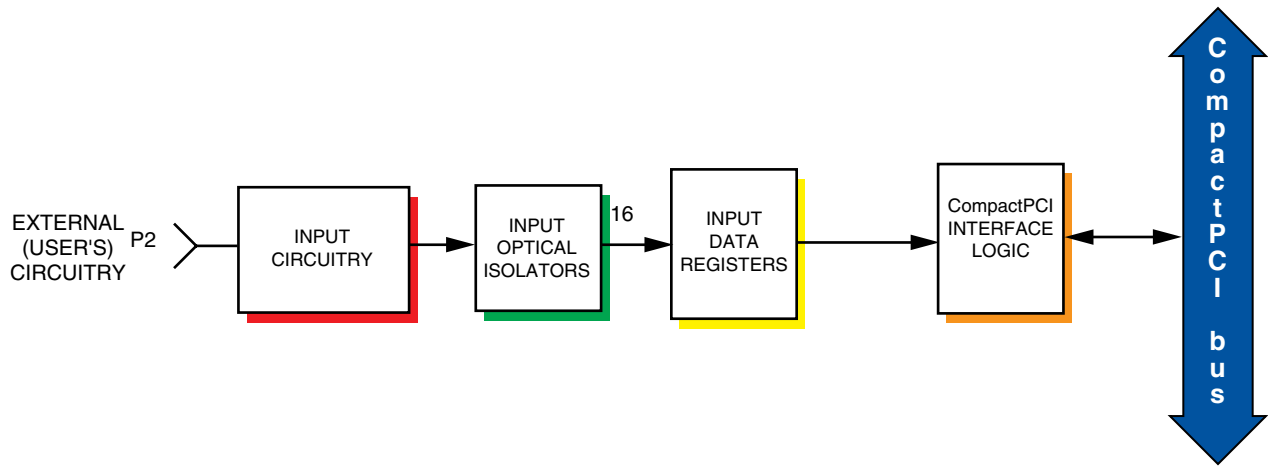


Figure 1. VMICPCI-1335 Functional Block Diagram

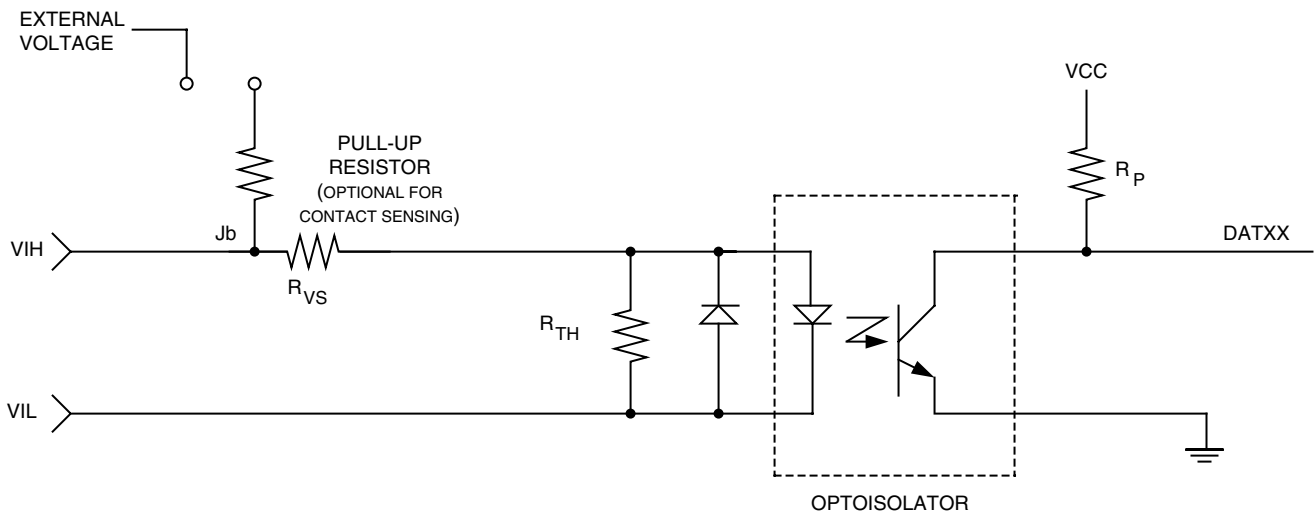
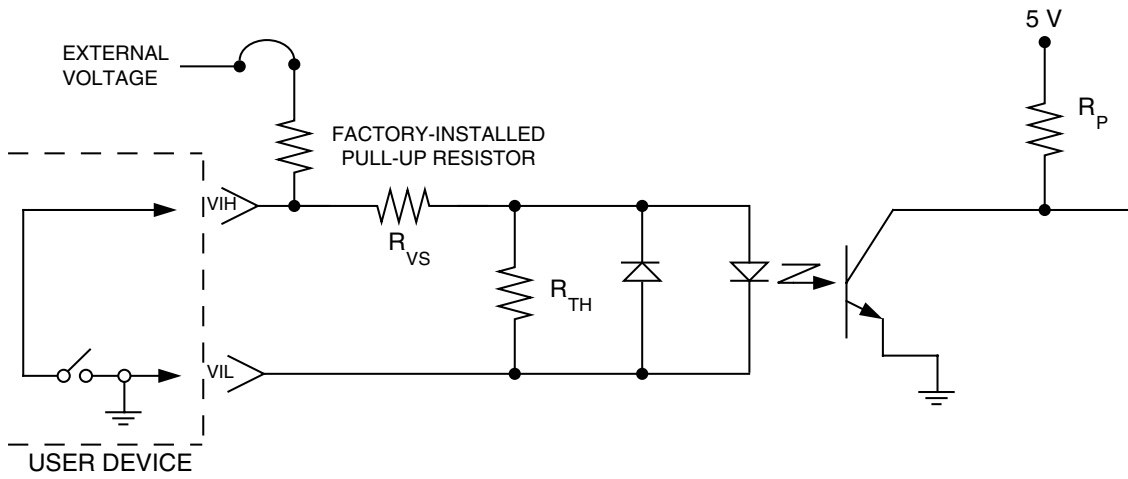
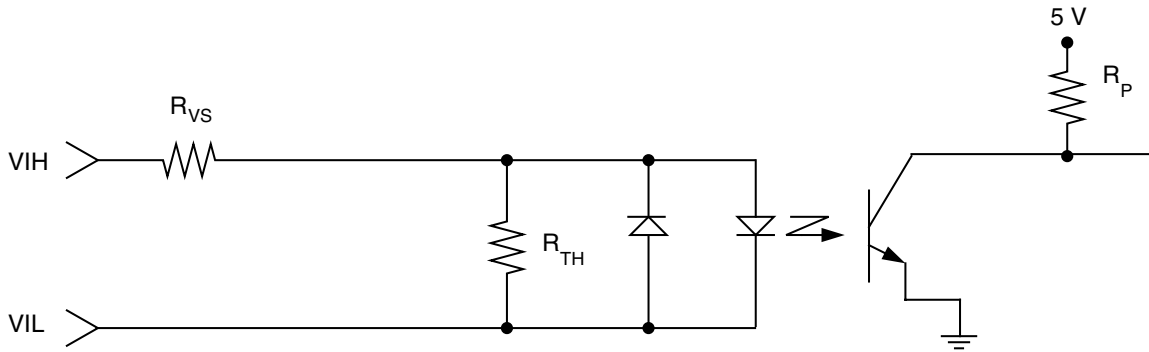


Figure 2. User Input Connection Circuit



a. TYPICAL CONTACT SENSE (CURRENT SINKING) OPTO INPUT



b. TYPICAL VOLTAGE SOURCE OPTO INPUT

Figure 3. Typical VMICPCI-1335 OPTO Input Configurations (5 to 125 V Inputs)

Table 1. Electrical Characteristics

INPUT VOLTAGE	THRESHOLD HIGH (V)	THRESHOLD LOW (V)
5 VDC	3.3	1.2
12 VDC	8.0	2.1
24 VDC	15.0	3.4
48 VDC	34.0	7
125 VDC	57.0	11.4