

## 64IN-VME

### 64 Channel, Isolated, VME Input Board



#### Features

- 64 Isolated Differential Inputs
- Input Range is 9V to 50V
- 2500VRMS Isolation
- VME Interface
- 16 Selectable Board Addresses
- Operation from -40°C to +85°C
- UL and CSA Approval Pending

#### Applications

- High Transient Environments
- High Ground Potential Differences
- High Noise Environments

#### General Description

The 64IN-VME is a complete, electrically isolated, 64 channel input board with an input range of 9V to 50V. The device completely isolates the field inputs from the digital logic. The 64 differential inputs are routed to the board via two front panel mounted DB78 female connectors. Isolation from the field inputs to the logic is 2500VRMS for one minute, which makes it ideal for applications with high transient voltages and different ground potentials.

The 64IN-VME board is a standard 6U design with a complete VME interface. The board provides up to 16 unique jumper selectable address locations for mapping the board to memory.

#### Input Stage Electrical Characteristics

Symbol	Parameter	Test Conditions	Min	Max	Unit
$V_{IN}$	Input Voltage, per channel	Continuous	9	50	V
$I_{IN}$ (CONT)	Continuous Input Current	$V_{IN} = 9V$ $V_{IN} = 50V$	600	9.0	$\mu A$ mA
$V_{ISO}$ (CONT)	Continuous Isolation	$V_{RMS}$ for 1 Min	2500		$V_{RMS}$
$V_{ISO}$ (PEAK)	Peak Isolation	$V_{RMS}$ for 1 Sec	5000		$V_{RMS}$

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#### Board and Chip Select Generation

The base address for the 64IN-VME is factory set at C00xxxH (BA23 – BA0). The tables below allow the user to configure the board to operate in a certain segment of memory space. The Board Mapping table illustrates the jumper placements required to put a board in a certain position within memory space. There are 16 possible locations. Once the board has been positioned in a general portion of memory space the Board Chip Select Addressing table illustrates where each of the four Bank Chip Selects will reside.

#### Board Mapping

JPR1 (BA11)	JPR2 (BA10)	JPR3 (BA9)	JPR4 (BA8)	Board I/O Address
2-3	2-3	2-3	2-3	0xxH
2-3	2-3	2-3	1-2	1xxH
2-3	2-3	1-2	2-3	2xxH
2-3	2-3	1-2	1-2	3xxH
2-3	1-2	2-3	2-3	4xxH
2-3	1-2	2-3	1-2	5xxH
2-3	1-2	1-2	2-3	6xxH
2-3	1-2	1-2	1-2	7xxH
1-2	2-3	2-3	2-3	8xxH
1-2	2-3	2-3	1-2	9xxH
1-2	2-3	1-2	2-3	AxxH
1-2	2-3	1-2	1-2	BxxH
1-2	1-2	2-3	2-3	CxxH
1-2	1-2	2-3	1-2	DxxH
1-2	1-2	1-2	2-3	ExxH
1-2	1-2	1-2	1-2	FxxH

#### Board Chip Select Addressing

BA7	BA6	BA5	BA4	BA3	BA2	BA1	Chip Select
0	0	0	0	x	x	x	BANK1_CS*
0	0	1	0	x	x	x	BANK2_CS*
0	1	0	0	x	x	x	BANK3_CS*
1	0	0	0	x	x	x	BANK4_CS*

A block diagram of the 64IN-VME is shown on the next page.

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