

64OUT-VME

64 Channel, Isolated, VME Output Board



Features

- 64 Isolated Sink/Source Outputs
- Output Range is 9V to 50V
- Output Current is 250mA/Channel
- 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 64OUT-VME is a complete, electrically isolated, 64 channel output board with an operating range of 9V to 50V at 250mA per channel. The board can be configured to sink or source in banks of four. The device completely isolates the field outputs from the digital logic. The 64 outputs are routed to the board via two front panel mounted DB50 male connectors. Isolation from the field outputs to the logic is 2500VRMS for one minute, which makes it ideal for applications with high transient voltages and different ground potentials.

The 64OUT-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.

SNKQI Output Stage Electrical Characteristics

Symbol	Parameter	Test Conditions	Min	Max	Unit
V _{BIAS}	Load Bias Voltage	Continuous	9	50	V
V _{SRC}	Load Sink Voltage	Continuous	.5	1.8	V
I _{snk (CONT)}	Continuous Sink Current	Continuous		250	mA
I _{snk (PULSE)}	Pulse Sink Current	Pulse Duty		500	mA
V _{ISO (CONT)}	Continuous Isolation	V _{RMS} for 1 Min	2500		V _{RMS}

SRCQI Output Stage Electrical Characteristics

Symbol	Parameter	Test Conditions	Min	Max	Unit
V _{BIAS}	Load Bias Voltage	Continuous	9	50	V
V _{SRC}	Load Source Voltage	Continuous	7.2	49.5	V
I _{src (CONT)}	Continuous Source Current	Continuous		250	mA
I _{src (PULSE)}	Pulse Source Current	Pulse Duty		500	mA
V _{ISO (CONT)}	Continuous Isolation	V _{RMS} for 1 Min	2500		V _{RMS}

64OUT-VME

64 Channel, Isolated, VME Output Board

Board and Chip Select Generation

The base address for the 64OUT-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 64OUT-VME is shown on the next page.

64OUT-VME

64 Channel, Isolated, VME Output Board

