

QUAD 24 BIT INPUT REGISTER, MODEL QIR

FEATURES:

- HIGH PACKING DENSITY
- THREE MODES OF DATA ENTRY
- HANDSHAKE LOGIC FOR DATA TRANSFER

THE MODEL QIR IS A FOUR CHANNEL INPUT REGISTER PACKAGED IN A SINGLE WIDTH CAMAC MODULE. EACH CHANNEL CONTAINS 24 BITS. DATA MAY BE LOADED CONTINUOUSLY, STROBED OR SINGLE SHOT. THIS LAST METHOD INSURES THAT DATA CANNOT BE LOST BY INHIBITING A DATA UPDATE UNTIL THE PREVIOUS DATA HAS BEEN READ BY THE SYSTEM. DATA MAY ALSO BE LOADED EFFICIENTLY USING A HANDSHAKE MODE MADE UP OF THE STROBE INPUT AND THE ACKNOWLEDGE OUTPUT. DATA IS CLOCKED INTO THE REGISTERS APPROXIMATELY 2USEC AFTER THE LEADING EDGE OF THE STROBE SO THAT DATA AND THE STROBE MAY BE TRANSMITTED AT THE SAME TIME AND LOADED CORRECTLY. WHEN A REGISTER IS CLOCKED IT'S LAM FLIP-FLOP IS SET AND AN ACKNOWLEDGE SIGNAL IS GENERATED TO INDICATE THE DATA HAS BEEN LOADED. WHEN THAT CHANNEL'S DATA HAS BEEN READ, THE LAM FLIP-FLOP IS RESET AND THE ACKNOWLEDGE SIGNAL RETURNS TO ZERO INDICATING NEW DATA CAN BE ACCEPTED.

SPECIFICATIONS

INPUTS (FOR EACH CHANNEL)

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| DATA | 24 BITS |
| STROBE | DATA WILL BE CLOCKED INTO THE REGISTER APPROXIMATELY 2USEC AFTER LEADING EDGE OF THE STROBE PULSE. |
| CONTINUOUS LOAD | DATA WILL BE LOADED CONTINUOUSLY WITH THIS SIGNAL AT A LOGIC "1". |
| INTERLOCK | THIS SIGNAL WILL PLACE THE MODULE IN A SINGLE SHOT MODE, SO THAT A DATA UPDATE CANNOT BE PERFORMED UNTIL THE PREVIOUS DATA IS READ. |
| ALL INPUTS | LOGIC "0" 2V MINIMUM LOGIC "1" .8V MAXIMUM INPUT IMPED. 1 TTL LOAD +10K OHM PULLUP |

NOTE: TO INSURE ERROR FREE READOUT OF DATA, THE CLOCKS ARE INHIBITED WHEN THE MODULE IS BEING READ SO THAT THE DATA CANNOT CHANGE DURING READOUT.

