



Applied Test Resources

DB1600 16 Bit Digital Card

The DB1600 is an inexpensive digital card that provides basic digital control capability without some of the more sophisticated features available on the DRM1650. The DB1600 allows for the control of 16 bits of data. The logic levels may be programmed anywhere within the range of ± 12 V. Readback function allows the bit pattern to be read back by the system. The threshold setting for the readback function may be programmed to any level between ± 10 V.

To minimize the possible effects of signal skew among the 16 different bits, there are two additional signals that may be used for synchronization: DCB_STROBE and DCB_ENABLE. These signals are programmed/controlled independently of the 16-bit main word. Digital words may be individually sent to the DUT or stored into RAM and sent as a vector pattern. The maximum amount of RAM is 10 M words and the maximum clock rate it is delivered can be programmed from 1 MHz to 25 MHz. To maintain a cost effective approach, pattern creation and editing is done via any editor capable of creating a textbased file (.txt) where each word is separated by commas (CDV format). This format is commonly available in most spreadsheet programs.

SPECIFICATIONS

Write Specifications*		Read Specifications*	
Number of Bits**	16	Number of Bits**	16
Maximum Output Voltage	± 12 V	Maximum Read Voltage	± 12 V
Maximum Drive Capacity	± 20 mA	Input Impedance	1 M Minimum
Programming Resolution	14 Bits	Measure Resolution	16 Bits
Write Voltage Accuracy	± 50 mV	Read Voltage Accuracy	± 100 mV
Skew	5 nS		
Pattern Memory	10 M Words		
Pattern Clock Speed	25 MHz		

*All specifications are subject to change without notice.

** There are two additional bits for Strobe & Enable in addition to the 16 bits
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