

## VM-DBA VME Display and Bus Analyzer Module

VM-DBA is a new test and diagnostic module for VME-bus systems which visualizes activities on all VME bus lines on the set of front-panel LEDs, but also allows one to digitize individual waveforms of all these lines into 2kBit -long storage memories, for a subsequent readout via VME or USB interfaces.

The digitization of waveforms is triggered by a programmable selection of conditions, including an external signal received at the front-panel LEMO connector.

### Features

- Format: 6U, 1 Slot
- conform to VME-bus ANSI/IEEE STD1014, IEC821 and IEC297
- VM-DBA visualizes the most important signals of the VME-bus by the help of large colored LED's:
  - 32 data and 32 address lines
  - interrupt lines (IRQ1-7, IACK, IACKIN)
  - Bus Clear, Bus Busy, BG1 – BG3 and BR1 – BR3
  - control signals (VD, CLK, RES, SYSF, ACF, AS, DS1, DS0, LWORD, DTACK, BERR)
  - address modifier (AM0 – AM5)
  - supply voltages (+5V, +3.3V, +/-12V)
- VME-bus-Slave D08(OE), D16, D32 and A16, A24, A32. Interrupt handler 1H(1-7), can be switched into transparent "display-only" mode
- 32-bit read and write register, accessed if no board answers on the VME-bus after a suitable time-out and asserts DTACK
- Two on-board, user-programmable SPI memories to store two different FPGA configurations. Firmware upgradable via VME
- Dual user interface – VME and USB
- Low cost VME bus analyzer with selectable trigger conditions
  - Sampling of all VME bus lines with 100MHz (10ns steps) or 200ns (5ns steps)
  - 2000 samples (100us / 200us time range)
  - Pre- / Post trigger region free selectable
- Low power CMOS-Technology: power consumption 1.4 A
- MS Windows based software for bus analyzer set-up and graphic display of wave forms

### Ordering Information

Standard configurations (others possible by request).

Part-Number	Description
VM-DBA	VME display and bus analyzer

### Technical Information

No further technical details available. Please see features and product literature.