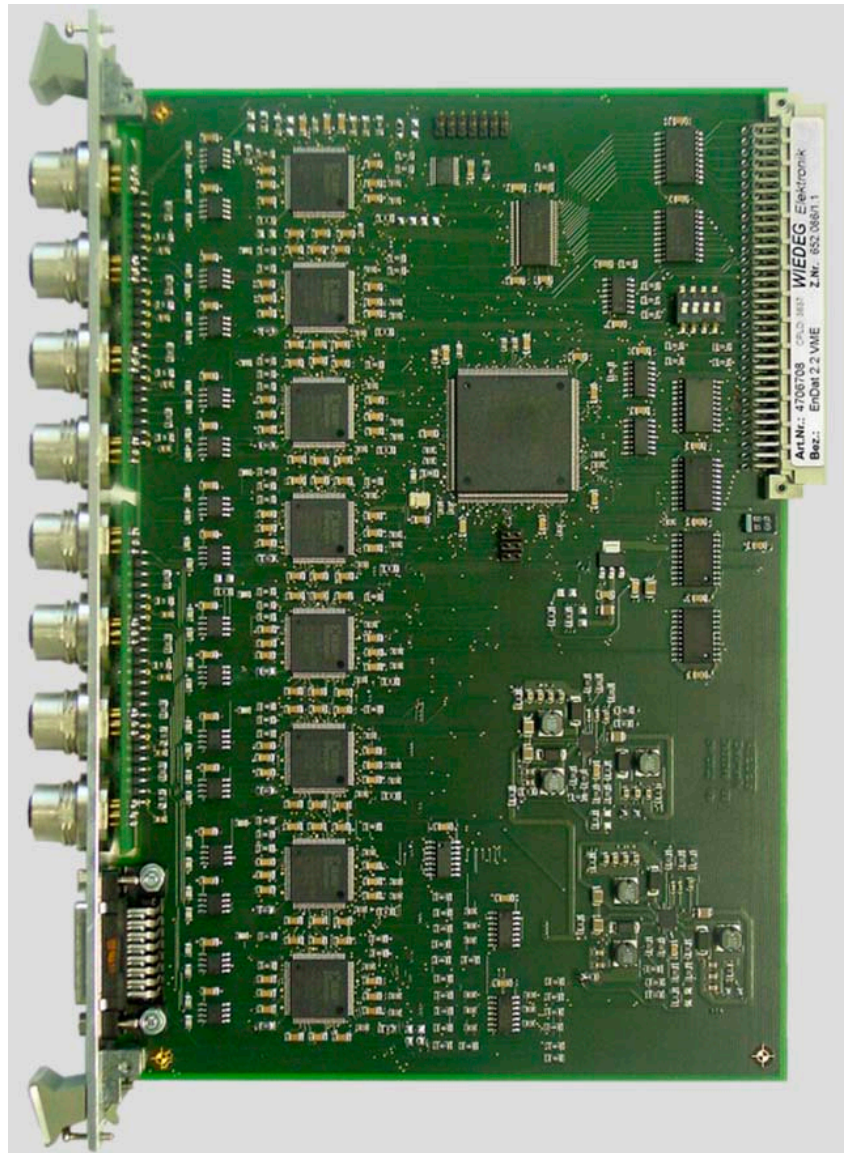


EnDat 2.2 VME – Analysis Board for Rotary- and Linear- Measurement Devices with EnDat 2.2 Interface

Board for ambitious analysis
of positions and velocities
with EnDat 2.2 measurement
devices in VME-systems

- High resolution analysis of absolute and incremental rotary and linear encoders with EnDat 2.2 Interface
- 8 Channels with master-interface and support of the full EnDat 2.2 instruction set
- “Slimmed” version with 4 measurement channels available
- Various internal and external latch-functions, with or without interrupt generation
- Latch of position values in single channels or synchronous, exactly simultaneous, in several channels via software- and timer-latch, with possible hardware cascading of multiple boards



Product Information

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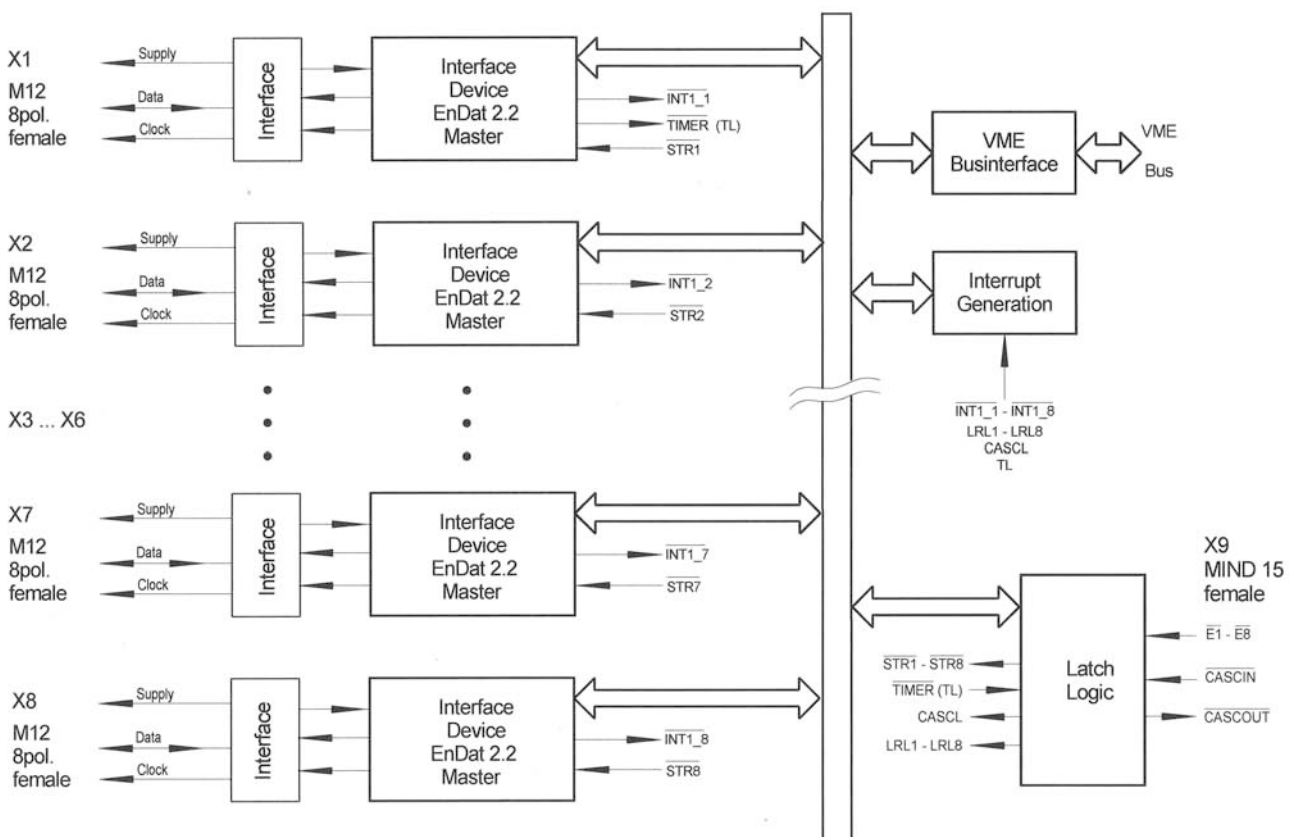
System Description

The EnDat 2.2 VME board comes with 8 channels for the evaluation of angle- and length-measurement sensors with EnDat 2.2 interface. All channels are equipped with a master-interface-circuit, which supports the whole EnDat 2.2 instruction set. With this board therefore high precision measurements of angles/length, and derived from this rotational speed/velocity, are possible in up to 8 axes, at very fast movement. In doing so the limits are set from the used measurement sensor.

By means of the 8 EnDat 2.2 interfaces position-

For the storage of the position values the board provides a latch-logic with a wide range of practical useful latch modes that can be set. The storage is possible via a software-latch, a timer-latch or with external signals, in a single or several chosen channels. With the /CASCIN-, /CASCOU-s signals a synchronous latch on multiple boards is possible.

With the means of an interrupt-logic, among other things, latch- or error-signals can generate an interrupt, controlled and enabled via software parameter settings.



values can be read out in single channels or in several channels exactly at the same time.

Besides this important basic function the EnDat 2.2 instruction set allows, as far as from the applied sensor supported, a whole series of further functions. Thus there is widespread monitoring of the sensor and the data transmission. Beyond that the measurement-system can be used for additional tasks, like f.i. the storage of an electronic type label.¹⁾

¹⁾ Technical Information "EnDat 2.2 – Bidirectional Interface for Position Encoders" by Heidenhain Co.

The timer-latch is generated thru the programmable timer implemented in the EnDat-master of channel 1.

The connection of the board to the VME-bus is done thru a VME-slave interface.

As EnDat 2.2 master interface device an FPGA programmed with the MAZET-firmware "FPGA-Soft Makro Standard-Master" is equipped.²⁾

²⁾ Data Sheet "EnDat 2.2 Master (Basic)" by Mazet Co.