

IF2008 - PCI interface card

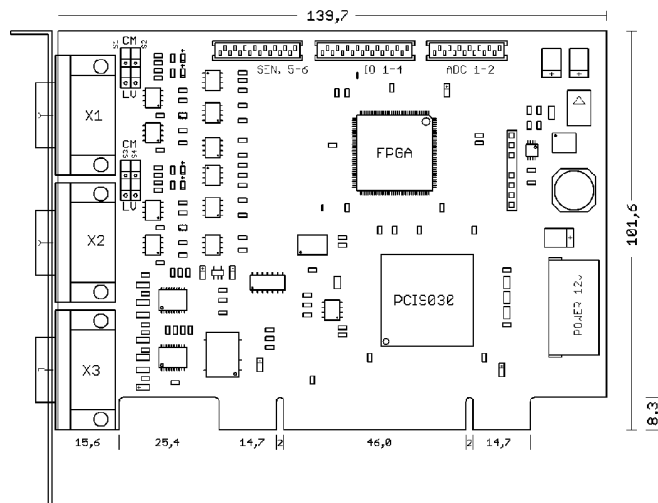
The IF 2008 interface card is designed for installation in PCs and enables the synchronous capture of 4 digital sensor signals and 2 encoders. The absolutely synchronous data acquisition plays an important role particularly for planarity or thickness measurement tasks. The data are stored in a FIFO memory in order to enable resource-saving processing in the PC in blocks.

Particular Benefits

- 4x digital signals and two encoders with basic printed circuit board
- Additional expansion board for a total of 6x digital signals,
- 2x encoder and 2x analogue signals and 8x I/O Signals
- FIFO data memory
- Synchronous data acquisition



IF2008 basic printed circuit board



Sensor Interface (X1 / X2)

- 2 RS422 drivers and two RS422 receivers with galvanic isolation per connector (input / output frequency max. 5 MHz)
- 2 LVDS or 3.3 CMOS outputs with galvanic isolation per connector (output frequency max. 5 MHz)

Encoder Interface (X3)

- Interface for two encoders with 1Vss or RS422 signals
- Power supply of the encoders with +5 V from PCI power supply without galvanic isolation (current consumption dependent on the connected encoders)
- Interpolation programmable from 1 to 64 times for encoders with 1Vss signals (input frequency max. = 3.2 MHz / interpolation)
- Evaluation programmable from 1 to 4 times for encoders with RS422 signals (input frequency max. = 3.2 MHz / evaluation)

Mechanics and environment

- Dimensions (circuit board dimensions) approx. 140 x 102 mm
- Maximum permitted ambient temperature +40 °C
- 2x D-SUB female connectors HD 15-pin for sensor connections
- 1x D-SUB male connector HD 15-pin for encoder signals

PCI bus

- PCI connector 3.3 or 5 Volt 32-bit 2x60 pin
- Target interface (slave) according to specification Revision 2.1 and 2.2 (PLX module PCI 9030)
- Bus clock speed max. 40 MHz
- Current consumption at +5 Volt approx. 0.5 A, without sensors and encoder

IF2008 supports the following sensors and measuring systems

- | | |
|---------------|----------------------------|
| optoNCDT 1420 | optoNCDT ILR 118x/ILR 1191 |
| optoNCDT 1750 | optoCONTROL 2500 |
| optoNCDT 1710 | optoCONTROL 2520 |
| optoNCDT 2300 | optoCONTROL 2600 |
| optoNCDT 2310 | |