



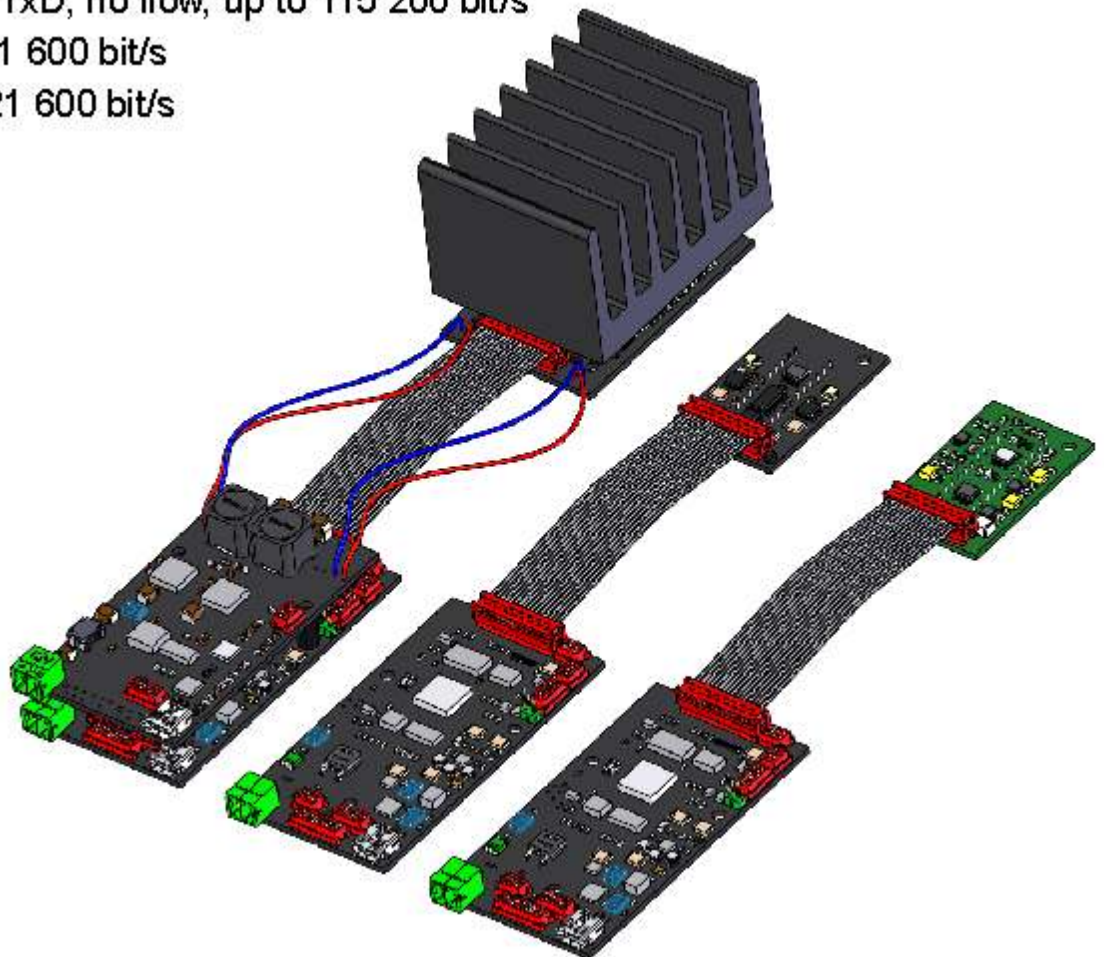
## VersaPic Spectrometer Electronics

The read out electronics **VersaPic** is designed to proceed data of line array detectors with high precision through various interfaces. Its processor board is evolved for reading data from different sensor types through the JETI Port interface. The electronics is really versatile due to this internal interface.

The powerful 16bit RISC micro controller executes the timing control for different line arrays, precalculations of spectra and communication via several standard interfaces. A thermoelectric cooler can optionally be populated as a piggy pack board. It regulates the sensor temperature of TEC equipped line arrays from different vendors very fast and accurate.

**VersaPic** can be equipped with following selectable interfaces:

- ◆ USB 2.0 Full speed (12 Mbit/s)
- ◆ RS232 8,N,1, RxD, TxD, no flow, up to 115 200 bit/s
- ◆ TTL-UART up to 921 600 bit/s
- ◆ RS422/485 up to 921 600 bit/s
- ◆ SPI up to 5 Mbit/s



# Specifications

Power supply	USB powered or 9 ... 12 V DC externally
Operation current	up to 250 mA
ADC Resolution	16 bit, 2 bit RMS (without oversampling), 4 bit INL, no missing code
Sampling speed	max. 5 MS/s
Sampling mode	Sample and Hold: 1, 4 - fold prog. oversampling or Correlated Double Sampling
Analog inputs	2 (odd and even), programmable for positive or negative video signals
Input full scale range	2 V or 4 V, programmable
Gain	1 ... 5 programmable in 64 steps
Offset	External compensation or programable up to +/- 300 mV

