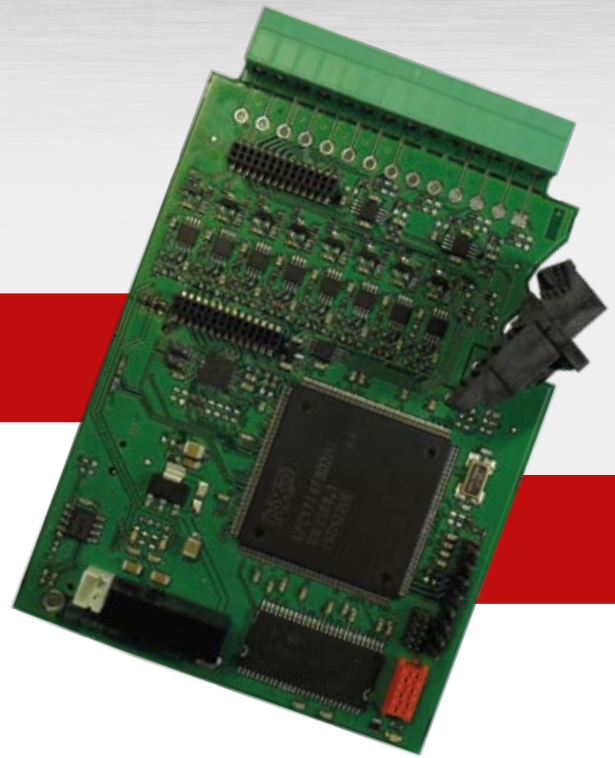




piA-Amplifier



Features

- Measuring amplifier for piA-AM3505 and piAx-AM3517
- 32bit RISC μ C with ARM-Cortex-M3 processor core
- 64Mbit SDRAM
- 8 channel, 16bit ADC
- 4 channel, 12bit DAC
- 4 x PWM outputs
- additional digital IOs and I²C via connectors
- Power supply via the baseboard

Overview

The "piA-Amplifier" expansion card enables the use of the piA-AM3352, piA-AM3505 and piAx-AM3517 as measuring amplifiers.

The 8-channel ADC allows parallel acquisition of analog signals at up to 100kSps per channel, while the integrated DA converter can simultaneously generate 4 analog signals at up to 100kSps. Alternatively, the 4 channels of the DA converter can also be used as a PWM driver.

Additional connectors allow the connection of a customer-specific analog front-end board. The input and output signals can be matched to the corresponding measurement task. Powerful 32-bit microcontroller and fast SDRAM memory allow fast processing of the data.

Power is supplied directly via the baseboard connectors.



Technical Data

piA-Amplifier

suitable for	piA-AM3505 piAx-AM3517
ADC	8 channels, 16bit, $\pm 5V$ range Sample rate from 1x1MSps up to 8x100kSps Integrated lowpass with fg = 50kHz
DAC	4 channels, 12bitm max. 100kSps per channel analog output stage
Microcontroller	32bit RISC with up to 120MHz clock frequency ARM-Cortex-M3 kernel
RAM	64Mbit SDRAM
Power supply	5 VDC via base board (IPC)