

Robust Compact Real-Time System

ADwin-Gold



ADwin-Gold



Compact Real-Time Designs

The **ADwin-Gold** is a powerful Real-Time systems in very compact and robust design. It includes many system features in a small package at a reasonable price. The **ADwin-Gold** is built in a reliable metal enclosure and includes a fast, local Real-Time CPU and memory, analog and digital inputs and outputs, as well as an USB or Ethernet interface for the communication with a PC.

The analog inputs are connected via two 8-channel MUX and two PGA to 2×16 bit and 2×14 bit ADCs. The signal acquisition is controlled by the **ADwin-CPU**. The sampling rate is determined by the ADC conversion time, MUX settling time, and CPU workload. It is always possible to acquire two channels without any phase-shift, important for correlated signals.

The **ADwin-Gold** has 2 or 8 analog outputs. The output range is ± 10 V with a settling time of 10 μ s to FSR and 3 μ s FSR/10. Parallel updating is achieved by using one DAC per channel, with one register per DAC. It is

possible to first write new values into the register, and then start the conversion for all channels with a single command synchronously.

ADwin-Gold provides 32 programmable digital input and output channels at 5V TTL /CMOS level, plus an Event input. The channels can be software selected in blocks of 8 as inputs or outputs. After power-up all channels are configured as inputs.

Optional configurations allow additional features such as counters, quadrature encoder interfaces, RS-232/-485, automotive CAN bus interfaces, CANopen¹⁾, LINbus²⁾ and SSI interfaces.

ADwin-Gold can be used in laboratories, on a DIN-rail in industrial machines, or in mobile and in-vehicle applications.

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	System features ADwin-Gold: 2 \times 8 analog inputs, ± 10 V multiplexed to 2 \times 16bit ADC (5 μ s) and 2 \times 14bit ADC (0.5 μ s), 2 analog outputs 16bit DAC (3 μ s), 16 digital inputs, 16 digital outputs D-SUB, 1 trigger input, 1 processor ADSP21062, 32bit, 40MHz, 256kB int. RAM, 16MB ext. RAM, 2m power supply cable to the desktop computer, compact metal enclosure
ADwin-Gold-ENET	ADwin-Gold with integrated Ethernet interface (10/100 Mbit/s), BNC sockets for analog signals
ADwin-Gold-D-ENET	ADwin-Gold with integrated Ethernet interface (10/100 Mbit/s), D-SUB sockets for analog signals
ADwin-Gold-USB	ADwin-Gold with integrated USB interface, BNC sockets for analog signals
ADwin-Gold-D-USB	ADwin-Gold with integrated USB interface, D-SUB sockets for analog signals
ADwin-Gold Options (manufacturing options only, later upgrading is not possible)	
ADwin-G-CAN	Option of 2 \times CAN-BUS (High-Speed), 2 \times RS232/485, 4 \times SSI decoder (only available for ADwin-Gold-D)
ADwin-G-CAN-LS	Option of 2 \times CAN-BUS (Low-Speed), 2 \times RS232/485, 4 \times SSI decoder (only available for ADwin-Gold-D)
ADwin-G-CO1	Option of four 32bit counters, which can individually operate in the following modes: period width measurement, impulse measurement or up/down counters with clock/direction or 4-edge evaluation. Input signal: 5V differential (RS422)
ADwin-G-DA	6 additional analog outputs, 16bit DACs (3 μ s)
ADwin-G-MEM64	Memory expansion from 16MB ext. memory to 64MB and memory expansion from 256kB int. memory to 512kB
ADwin-G-Boot	Flash EPROM boot-loader for stand-alone operation without PC, only in combination with an Ethernet interface
ADwin-G-Mount	DIN-rail installation kit
Accessories	
ADwin-G-Pow	External power supply (12V DC) for the ADwin-Gold (10–35V)

¹⁾ via software; ²⁾ via software and driver

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A G R E A T E R M E A S U R E O F C O N F I D E N C E

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