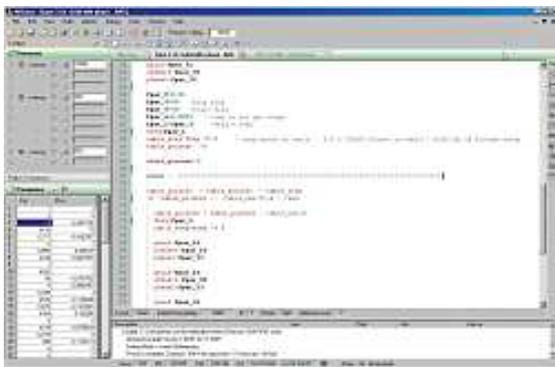


INFORMATION of ADbasic

Comfortable real-time programming with ADbasic

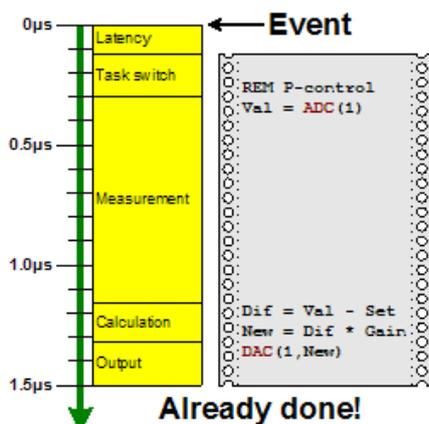


ADbasic is the solution for flexible and simple programming of fast data acquisition, open-loop and closed-loop control procedures. The **ADbasic** programs are executed on the real-time CPU of the **ADwin** hardware after the occurrence of an event signal.

This event signal can either be generated by the internal timer of the **ADwin** CPU or by an external trigger input. The **ADwin** CPU reacts to a new event within microsecond range!

The processing of the event such as the calculation of a correction value is done with high-speed so that precise process response times (reaction times) of a few microseconds can be guaranteed.

Fast digital closed-loop controllers



ADbasic processes are extremely fast:

The **ADwin** CPU executes **ADbasic** processes for time-critical tasks independently of the PC. Thus, the CPU on the PC is completely available for data post processing and visualization.

Optimal time behaviour is achieved by this consequent task sharing. Furthermore, the instantaneous processing of each measuring value e.g. by numerical algorithms or limit value monitoring is guaranteed. **ADwin** immediately reacts to the result by generating the appropriate output signal.

All necessary data acquisition and control functions are already integrated into the **ADbasic** instruction set allowing you to write compact real-time programs. After the compilation by **ADbasic**, these real-time processes run independently and with high-speed on the **ADwin** hardware.

ADbasic provides the common BASIC commands for mathematical operations. The additional functions are:

- Acquiring of analog inputs
- Setting of analog outputs
- Reading and setting of digital inputs and outputs
- Starting, stopping, setting and reading of counter inputs
- Data exchange between multiple **ADbasic** processes
- Data exchange with multiple PC software applications

ADbasic is easy to learn by its BASIC like syntax. All global **ADbasic** variables can be changed and displayed in a separate window. The cross compiler generates and downloads the binary real-time files within a few seconds to the **ADwin** hardware. Program changes can be done fast and easily. The efficient working with **ADbasic** considerably reduces the effort for realizing your ideas.