

Version **3.20.1201** :

Most important features of this version compared to version 3.20.1200 :

- ADwin operating system (ADwin9.BTL) :
 - support also of the ADwin-Gold-ENET and ADwin-Gold-USB (both Rev. B1 or greater)

Most important features of this version compared to version 3.20.0804 :

- ADbasic version 3.20.12 :
 - Bugfixes on libraries and `Sleep` instruction in optimization level 2
 - Bugfix on `sin-`, `cos-` and `powerfunction (^)` at processes with low priority
- ADwin driver :
 - improved USB driver
- ADwin operating system (ADwin9.BTL) :
 - Bugfix on Booting the ADwin-Pro system (undefined behaviour)
- Developer Software :
 - Matlab driver : (license key for this is required).
- ADtest V1.6 : (settings are now stored in the registry in location „HKEY_CURRENT_USER“)
- ADwinTCPIPserver V1.1 : (for the first time on the ADwin-CD)

Most important features of this version compared to version 3.20.0703 :

- ADbasic version 3.20.08 :
 - Bugfixes on libraries and on calculations with signed constants
 - The default setting for “16 Bit resolution” is now “Yes”
- ADbasic include files improved : `ADwL16.inc` , `ADwgcnt.inc` , `ADwpad.inc`
`ADwpDIO.inc` (new: instructions for Pro-CO4 , Pro-DIO-32 (Rev B))
- ADbasic example “`Bas_Dmo7.bas`” improved
- FFT– library available for the first time in : `C:\ADwin\ADbasic3\lib`
- ADwin driver improvements :
 - On using the functions `GetData_Float` / `GetFifo_Float` / `GetFPar_All` , possibly existing invalid bit patterns (e.g. because of not initialized data) are now set to Q-NAN
- Developer Software :
 - improvements in Labview and C – driver
 - **ADwinActiveX V 2.0** available for the first time in : `C:\ADwin\Developer\ActiveX`
Therefore for the first time a driver for the developer environment :
 - **Visual Studio .NET**: C#, VC++ 7, VB.NETAs well as for the developer environments :
 - Visual C++ 6, Visual Basic 6 , Borland Delphi , Borland C-Builder , Agilent VEE, etc.
- ADPro Version 2.9 : The revision identifier is now displayed for all (i.e. also old) modules
- Windows Installer Engine version 2.0 :
 - The new engine version will be installed automatically, if necessary.
 - Problem on deinstalling older versions (Error 1316) is now fixed
 - Service pack 6 is now required for WinNT (SP6 is available on CD in directory : `NT4_SP6a`).

Most important features of this version compared to version 3.20.0109 :

- ADbasic version 3.20.07 :
 - Bugfixes on strings, libraries, ADC12, optimization level 2, power function (^)
 - Escape sequences for strings
 - Constants are now combined/calculated at compile-time, no longer at runtime. This is valid for all optimization-levels. Advantage : programs are executed faster. But **ATTENTION** : waiting times (e. g. for multiplexer settling time) , which have been implemented by program code containing calculations with constants, are now shorter. They have to be reworked respectively.
- ADbasic include files : `ADwpEXT.inc` (new instruction because CAN-LS : `GET_LINE_STATUS`
`ADwL16.inc` (for ADwin-L16-DIO1 and ADwin-L16-CO1)
- ADwin driver bugfixes :

- improved errorhandling for diverse functions
- improved USB driver (errorhandling)
- ADwin operating system (ADwin9.BTL) :
 - decrease in the influence of the process- timing, which could be caused by :
 - **BEGIN_CRITICAL_SECTION** (often used in : ADwin-Pro)
 - or division in a process with low priority
- Developer Software :
 - improvements in Visual Basic, Labview and C - driver
- ADPro Version 2.7 : new : identification/calibration of new module Pro-AIN-F-4/14, Pro-AIN-F-8/14
- L16Calib V1.0 this is the calibration program for ADwin-Light16
- ADconfig V2.2 : (configuring of several Devices is more user friendly now)
- ADtools V4.4 :
 - new : TString (for displaying and editing of ADbasic- strings)
 - TPar_FPar : new : individual labelling of each Par / FPar-line
 - Bugfixes
- ADfind_dll V 1.0 searches for all ADwin- DLL and BTL files, which are stored on the PC

Most important features of this version compared to version 3.20.0101 :

- ADwin driver feature :
 - higher data transfer rates with GetData_Long, ..._Float, ..._String, ..._Double on ENET, if firmware of the ADwin ENET interface >= 2.5 and if <= 1750 data are transferred from the ADwin- system
- ADwin driver bugfixes :
 - occasional problem (windows- protection fault) with GetData function on networks, which have a lot of traffic
 - occasional problem (wrong errorcode) with SetFifo function on ENET
- ADPro version 2.6 : new : identification of new counter module Pro-CO4
- ADbasic include files :
 - ADwpAD.inc (because of new Pro-AIN-8/16-RB , Pro-AIN-32/16-RB , Pro-AIN-F-4/14, Pro-AIN-F-8/14)
 - ADwpDIO.inc (new: instructions for Pro-CO4 (and SSI))
- Developer Software :
 - Testpoint driver version 1.3.6 with the following new actions :
 - Get_Last_Error
 - Read Parameter All, Read Parameter Block
 - Labview driver version 2.0 with the following new functions:
 - errorhandling conformable with Labview (error wiring via Error In, Error Out : based on Get_Last_Error, Get_Last_Error_Text)
 - Get_Par_Block, Get_FPar_Block
 - GetData_String, SetData_String, String_Length
 - Process_Status, Data_Length, Set_Globaldelay, Get_Globaldelay, Set_Language
- ADEthFlash V1.5 (new : EEprom support)
- ScanAEI V1.2 (new : If DIL-switch 1 is present, the version number is displayed with an appended ".1")
- ADtools : bugfixes on Tgraph and TProcess
- ADconfig V2.1 : easier user guidance for the configuration of Ethernet

Most important features of this version compared to version 3.00.3011 :

- Window XP support (new USB driver)
- ADbasic version 3.20.01 : new :
 - Libraries (see : ADbasic3.20-lib_eng.pdf)
 - String functions (see : ADbasic manual : ADbasic3_eng.pdf)
 - „Syntax Color“ (highlighting of ADbasic keywords, comments, etc.)
 - Autoindent
 - multiple “Undo“ and “Redo“
 - “Open All Includes“ (opens all files, which are included by the #INCLUDE command)
 - “Tabsize“ now adjustable (Default Tabsize = 2 , therefore it may be necessary to check the format of those ADbasic programs, which are using TABs)
 - On right mouseclick :
 - (Un-)Comment Block (changing multiple codelines to comments and vice versa)
 - Indent/Outdent
 - Mark Controlblock (on right mouseclick on a line, which contains **IF** , **ELSE** or **ENDIF** , the whole textblock of the **IF – ELSE – ENDIF** structure will be

highlighted ; the same is also valid for : DO .. UNTIL,
FOR .. NEXT)

- Info window (shows several compiler- error messages and warnings)
- diverse bugfixes (e.g. at **SELECTCASE**)
- ADPro version 2.4 : new : calibration function now has adjustable gain; binary input possible; ability to switch between UNI/BIP voltage ranges; identification of new module AIN32/16RB
- ADtest V1.4 : last used Device No. is now saved
- ADconfig V2.0 : diverse improvements, timeout now adjustable with resolution of 100 ms
- ADwin driver :
 - better error handling
 - bugfix at Set_Fifo (error occurred only with Ethernet, if Float Data were converted to Long DATA(s))
 - bugfix at process-scheduling of low priority processes
- Developer Software : Visual Basic , Delphi and C – driver with the following new functions :
 - Get_Last_Error, Get_Last_Error_Text
 - Get_Par_All, Get_FPar_All
 - GetData_String, SetData_String, String_Length
 - Process_Status, Data_Length, Set_Globaldelay, Get_Globaldelay, Set_Language
 - etc.
- ADtools V4.1 (new : TFifo and TBin)
- ScanAEI V1.0 (scans all ADwin-Ethernet interfaces, which are located in the same TCP/IP- subnet as the PC)
- Linux : latest driver and (for the first time) XADbasic_beta (= ADbasic-GUI)

Most important features of this version compared to version 3.00.2735 :

- ADPro version 2.2 : new : calibration function for Rev. B modules
- ADtest V1.3 : now also GOLD and Light-16 is supported ; Info window shows all installed ADwin software packages
- ADconfig version 1.7 : now available : 4-digit Linkaddress
- ADbasic : diverse bugfixes on : DAC- instruction, libraries, external event, integer division
- diverse updates and bugfixes on : ethernet, profibus, ADserver.exe, standard processes, Bootloader (Link), process-timing of low priority processes, communication problem on very big blocktransfer of data under WinNT and Win2000 fixed, problem on starting and stopping of processes under Testpoint fixed
- developer software :
 - Labview driver adapted for Labview 6.0
- for the first time on CD : ADbasic development system and drivers for Linux

Most important features of version 3.00.2735 compared with version 3.00.2733 :

- ADEthFlash V1.2 (for programming the bootloader and updating the firmware of ADwin-systems with Ethernet interface)
- ADTools V 3.6
- Significant improvement of the transfer rate of ADwin-light-16

Most important features of version 3.00.2733 compared with version 3.00.2332 :

- support of ADwin-systems with Ethernet interface
- under Win2000 also ADPCMCIA and PCI is now supported.
- under Win2000 the ISA-LINK cards are managed now in the "Device Manager".
- new ADbasic instruction : **SELECTCASE**
- "16 Bit resolution" is now the default setting in the ADbasic Compiler Options
- improvements in the accuracy of calculations with the power- function (^)
- improvements of the functionality and the (transfer rate) performance of USB