ATMEL PLD Product Programming Support Update

Revision Date: August 5, 1999
ATMEL PLD Hotline: 408-436-4333
ATMEL PLD Email: pld@atmel.com
ATMEL BBS :   408-436-4309 (Baudrate 28.8K, 1 Stop, No parity, 8 Data bits)
ATMEL Faxback: 1-800-29-ATMEL
ATMEL Website: http://www.atmel.com

To facilitate quick programming support, most programmer vendors allow customers to download the latest
programming algorithms from their Bulletin Board Systems/Websites. To obtain programming support
information for programmers not listed here, please call the Atmel PLD Hotline (408) 436-4333.

ATMEL has implemented a fax back service, for any data sheet or literature request for all ATMEL devices
including EPLD's. Please call the fax-back service if you need data sheets or information for any ATMEL
device. We have also set up our Website with our Data sheets which can be downloaded or viewed with an
Adobe Acrobat viewer. If there are specific questions regarding PLDs, please call the PLD hotline or Email
us at the PLD email address.

PLD Programmers' News

*   08/05/99
    ATF22LV10C/CZ: Needham's SW V4.09 has corrected programming problem.

*   07/09/99
    ATF750C/CL: Data I/O Extended Algorithm V6.0 for Unisite, 3900, 2900 and Autosite is available on Atmel BBS and
    website (750CV60.EXE).

*   06;29/99
    ATF750C/CL: Needham's EMP20 V4.07 and HiLo All-07 V3.47B have programming supports for the ATF750C/CL.

*   05/04/99
    ATF750C/CL: Data I/O Extended Algorithm V5.8 for UniSite is available on Atmel BBS and website (F750C.EXE).
    Please note that the F750C-PLCC AS 750-PLCC and F750CL-PLCC AS 750-PLCC device types are not yet fully
    on this Extended Algorithm. Please contact Atmel PLD Applications for information.

    ATF750C/CL: BP-1200 V3.41 is available on BP's website to support ATF750C/CL in 24-pin DIP and 28-pin PLCC.

*   04/29/99
    ATF16V8C: You may experience programming failures when programming a part using Needham's EMP20 Programmer
    with Software Rev 4.04. Workaround is to use an earlier Rev 4.01

*   02/18/99
    ATF1500ABV: BP-1200 has programming support for the ATf1500ABV in 44-pin PLCC/TQFP packages; has test
    vector support at 2.7 V - 3.6 V

    ATF22V10C/CZ: Data- I/O has modified their algorithm to support Vectors; Use this alg. if you encounter - Device
    Overcurrent Error when running test vectors
    Keep Current version available on Data _I/O website for Rev 5.8 and 5.9

*   02/08/99
    ATF1504AS: Needham's SW V3.99 has programming support for 44, 84 PLCC, 44 TQFP, 100 TQFP, and 100 PQFP
    package types. Requires a specially modified #23 Family Module. Please contact ATMEL EPLD Applications or
    Needham's Electronics for modification instruction.

*   01/25/99
    ATF22LV10C/CZ: Extended Algorithm V5.8 for UniSite and 3900 available on Atmel BBS and website (F22LV10C.EXE).

*   01/05/99
    ATF22LV10C/CZ: BP Microsystems, HiLo (Tribal), and SMS have programming supports for all package types.

* 01/05/99
ATF22LV10C/CZ: Extended Algorithm Rev 5.7 (22LV10_S.EXE) for Data I/O 3900 available on ATMEL BBS/Website.

* 11/02/98
With BP Microsystems software version 3.36, checksum loaded into buffer from a JEDEC file is incorrect for ATF1500 device type. Workaround is to backrev to version 3.35, which is only available on the BP BBS (713-688-9284).

* 10/02/98
ATF1504AS: System General has support for 44 PLCC/TQFP, 68 PLCC, 84 PLCC, and 100 PQFP package types on FXand M-APRO programmers.

* 10/02/98
ATF22V10CZ: System General has changed device type for ATF22V10CZ from ATF22V10Z to ATF22V10CZ.

* 10/01/98
ATF16V8B: BP has support for ATF16V8B with new die and new Manufacturer ID. Register preload is also supported.

* 08/04/98
ATF16V8B: Stag Universal programmer SW version 8.8.4 supports ATF16V8B

* 07/29/98
ATF16V8B: HILO (Tribal) SW version 3.44A and SMS Sprint SW version Ab/98 support ATF16V8B with new die.

* 07/22/98
ATF22LV10C/CZ: Extended Algorithm Rev 5.7 (F22LV10C.EXE) for Data I/O Unsite available on ATMEL BBS/Website.

* 07/20/98
ATF1504AS: Keep Current Algorithms Rev 5.7 for Data I/O Unisite, 3900, and Autosite available on ATMEL and Data I/O BBS/Website.

* 07/08/98
Keep Current Algorithms Rev 5.7 for UNISITE support for ATF22V10BQL-UES 28-pin LCC, ATF22V10BQ 28-pin PLCC, and AT22V10B 28-pin LCC available on ATMEL and Data I/O BBS/Website.

* 07/06/98
ATF22LV10C(Z): BP, HILO (Tribal), Needham's and SMS support programming of this device in 24-pin DIP and 28-pin PLCC packages.

* 06/12/98
ATF22LV10C(Z): Rev 5.6 Extended Alg. for Data I/O Unisite, 3900 available on Atmel BBS.

* 04/09/98
ATF1504AS: BP Microsystems, Data-I/O support programming of this device in 44-pin PLCC, 44-pin TQFP, 68-pin PLCC, 84-pin PLCC, 100-pin PQFP, and 100-pin TQFP packages.

* 04/09/98
ATF22V10B/BQL: Rev 5.6 Keep Current Alg. for Data I/O Unisite available on Atmel BBS/Web. Added support to 28-pin LCC package.

* 03/25/98
ATF16V8B: Advantech LabTool-48 Programmer supports programming of this device with S/W version 2.61 or later.

* 03/23/98
Rev 5.6 Keep Current Alg. for ATF1508AS in 100-pin TQFP and 160-pin PQFP are available for Data I/O Unisite/3900 Programmer on ATMEL BBS/Website.

* 03/23/98
ATF16V8B: Needham's (EMP20), HILO/Tribal Microsystems and System General have solved programming

problems on newer devices with latest S/W versions.

*   03/03/98
    ATF16LV8C: The Advin Pilot Series Programmers support Programming of this device with S/W Rev 10.88B.

*   03/02/98
    ATF16V8B: You may experience programming failures when programming a part using Needham's EP20 Programmer, HILO/Tribal Microsystems and System General Programmers.

*   01/27/98
    Needhams has support for ATF1508AS in all packages. Rev 5.5 Extended Alg. for ATF1508AS in 160-pin PQFP and 100-pin TQFP are available for DATA I/O Unisite/3900 Programmer on ATMEL BBS/Website.

*   12/18/97
    The ATF1508AS device has Programming Suppport implemented on the BP Microsystems Programmer for all packages.

*   11/20/97
    The ATF1508AS device has Programming Suppport implemented on HILO/Tribal Microsystems and SMS-Sprint Programmers.

*   11/17/97
    Keep Current Algorithms for ATF1508AS (rev 5.5) are available on Data I/O and ATMEL Websites/BBS for the 3900 and UNISITE Programmer.

*   10/07/97
    Keep Current Algorithms for ATF16V8C/CZ (Rev. 5.3) are available for Data I/O Unisite Programmer on ATMEL Website/BBS.

*   10/03/97
    ATF16LV8C, ATF1500A, ATF1500ABV device support available on Data I/O 3900 and Unisite Programmers on new Release 5.5. Keep Current Algorithms for ATF16LV8C for release 5.4 are available on Data I/O Website/BBS and ATMEL BBS.

*   9/29/97
    Extended Algorithms for ATF1508AS in 84 pin PLCC and 100 PQFP are available for Software Rev 5.4 for Data I/O Unisite programmer.

*   8/27/97
    The BP Microsystems series of programmers support ATF22V10C/CZ (Rev 3.27Beta). BP has also revised their algorithm for the ATF22V10B device. Software Revisions (3.20 and earlier) may have trouble verifying Atmel ATF22V10B devices with date code 9705 and later.

*   8/14/97
    The Advin Pilot series of Programmers require the latest revision of Software (Rev 10.87c) in order to correctly program the ATV750B.

*   7/21/97
    The Hilo Programmer now has separate device types for the ATF22V10B and ATF22V10B(UES). Please download palp5.exe(version 3.40c) off the ATMEL BBS.

*   7/15/97
    Please download A1500.EXE off the ATMEL BBS in order to program the ATF1500A/ABV devices using a HILO/Tribal Microsystems Programmer.

*   7/8/97
    For ATF20V8B devices, please ensure that on the HILO/TRIBAL Flex Programmers, you have the latest S/W Rev. (PALP5.EXE ver 3.40b). Older revisions may not correctly identify devices with incorrect Manufacturing IDs.

*   7/1/97
    For ATF22V10B devices, please ensure that you select the correct device type. Most Programmers have separate

device types in their menu such as ATF22V10B (Standard 22V10) with 5828 fuses and ATF22V10B(UES) which is GAL22V10 format with 5892 fuses. Please ensure that you have the latest software revision, else devices may not program correctly.

* 6/19/97
The ATF1500A is supported on System General and Hilo (Tribal Microsystems) Programmers.

* 4/11/97
The ATF1500A comes with the Security fuse and Programmable Pin Keeper Bit and is supported on SMS and Needham Programmers.

* 4/11/97
The ATV2500L/ATV2500BL/ATV2500BQL could have increased Icc current if the Security bit was blown(Refer to Needhams and Data I/O below).

* 2/28/97
The ATF1500A CPLD can be programmed using the ATF1500 device type.

* 2/28/97
ATF22V10C/CZ: Programming support is available on Data I/O's BBS in Beta_Algs Directory. The Extended algorithm rev 5.2 is available for 3900 Programmer Model and the file name is 39_V53.EXT.

* 2/21/97
ATF16LV8C: Programming support is available on the Data I/O and BP Microsystems Programmer.

* 1/22/97
ATF16V8C: Programming support is available on the System General Programmer.

* 1/7/97
ATF16V8C/CZ: Programming support is available on Data I/O's BBS in Beta_Algs Directory on their BBS as 16V8C.zip for V5.2 and V5.3.

* 12/26/96
ATF22V10C/CZ: Programming support is available for SMS Sprint programmers.

* 11/18/96
ATF22V10C/CZ: Programming support is available on Data I/O's BBS (Extended algorithm rev 5.2 is available for UNISITE, 3900 and 2900 Programmers). The file is 22V10C.EXT and is available on Data I/O's BBS in Beta_Algs Directory.

ATF22V10B(UES): Data I/O has revised their programming algorithm to correctly program the ATF22V10B with the UES option. This is available on ATMEL's BBS as an extended algorithm.

* 11/12/96
AT22V10B: You may experience programming failures when programming a part using Needham's EP20 Programmer.

* 9/4/95
ATF20V8B: You may experience MFGR-ID check errors for some ATF20V8B's. The parts, however, are fully functional. Please call ATMEL PLD Applications if you are experiencing this problem.

Device Programming Support List

Company	BP Microsystems (713)688-4600 Fax: (713)688-0920 BBS: (713)688-9283 URL: www.bpmicro.com	Data I/O (425)881-6444 Fax: (425)882-1043 KC BBS: (425)882-3211 BBS: (425)882-3211 URL: www.data-io.com			Hi-Lo System Research (02)7640215 Fax: 886-2-7566403 URL: www.hilosystems.com.tw (Tribal Microsystems) (510)623-8859 BBS: (510) 623-0430 URL: www.tribalmicro.com
Model Name	**CP1128,PLD1128/ 1100/1200**	**UNISITE 48**	**AUTOSITE/3900**	**2900**	**FLEX700/ALL-07 TUP400/ALL-03A**
F16V8B	**3.122**	**4.9**	**2.9**	**3.7**	**3.43A** Req's V3.41B of PALTEST for vector test
F16V8C/Z	**3.21**	**5.2EX**	**5.2EX**	**5.2EX**	**3.39** Req's V3.41B of PALTEST for vector test
F16LV8C	**3.22**	**5.5**	**5.5**		**3.40C** Req's V3.41B of PALTEST for vector test
F20V8B	**3.11**	**5.0KC**	**2.8KC**	**3.8KC**	**3.40B** Req's V3.41B of PALTEST for vector test
F22V10B	**3.23**	**5.3**	**5.3**	**5.3**	**3.28*** Req's V3.41B of PALTEST for vector test
F22V10C/Z	**3.27**	**5.2EX**	**5.2EX**	**5.2EX**	**3.39C** Req's V3.41B of PALTEST for vector test Doesn't support F22V10CEXT
F22LV10C/Z	**3.37Beta**	**5.7EX** User might experience problem with test vector	**5.7EX**		**3.45D**
V750B	**2.32**	**4.7**	**2.5** X-PRGM using V750 JEDEC file is available	**3.5**	**3.28*** Req'sV3.41B of PALTEST for vector test
F1500	**3.13** TQFP req's SM44QC adaptor	**5.1**	**5.1** TQFP req PPI BASE & PPI-0586 socket	**5.1** Site48HS may be req'd for DIPs	**3.39** Supports PLCC Req's ADP-ATF1500-PL.Q adapter
F1500A	**3.27/3.39(F1500ABV)** TQFP req's SM44QC adaptor	**5.4EX** X-PRGM using F1500 JEDEC file is available in V5.5 TQFP req's PPI BASE & PPI-0586 socket	**5.4EX**	**5.4EX**	**3.40C** Supports PLCC Req's ADP-ATF1500-PL.Q adapter
V2500B	**2.33***	**4.7**	**2.5** X-PRGM using V2500 JEDEC file is available	**3.5**	**3.29*** Req's V3.41B of PALTEST for vector test Req's PAC-PLCC 44 adapter for PLCC
F1504AS	**3.32 Beta**	**5.7KC** 44,68,84 PLCC, 100 PQFP, 100 TQFP 100 TQFP req's PPI Base & PPI-0597 44 TQFP req's PPI Base & PPI-0536 (no carrier) 100 PQFP req's PPI Base & PPI-0531N (no carrier)	**5.7KC**		
F750C/CL	**3.41**	**6.0 EXT** F750C/CL-PLCC AS 750-PLCC not supported yet			**3.47B**
F1508AS	**3.29** Vector support for 84 PLCC, 100 PQFP, 100 TQFP, 160 PQFP	**5.6** 84 PLCC & 100 PQFP **5.6KC** 100 TQFP & 160 PQFP 100 TQFP req's PPI BASE & PPI-0597 (no carrier) 160 PQFP req's PPI BASE & PPI-0551N (no carrier)	**5.6** **5.6KC**		**3.40D** Supports 84 PLCC & 100 PQFP with sockets

Comments:

* Limited vector support   ** Qualification in progress

Device Programming Support List

Company	Needham's Electronics (916)924-8037 Fax: (916)924-8065 BBS: (916)924-8094 URL: www.needhams.com		SMS USA (408) 542-0388 Fax:(408) 542-0389 Fax: (49)7522-9728-50 BBS: (49)7522-972888 URL: www.sms-sprint.com	System General (408)263-6667 Fax: (408)262-9220 BBS: (408)262-6438 URL: www.sg.com.tw
Model Name	**EMP20**	**EMP30**	**SPRINT PLUS/EXPERT/** **OPTIMA/PLUS48/MULTISITE**	**TURPRO-1TX**
F16V8B	**3.91** Req's SIMM 3 module		**C3/94**	**2.37**
F16V8C/Z	**3.29**		**B7/96**	**2.30J**
F16LV8C	**3.68**			**2.32G**
F20V8B	**1.95** Req's SIMM 3 module		**A1/94**	**2.14D**
F22V10B	**3.29** Req's SIMM 3 module		**B7/96**	**2.3**
F22V10C/Z	**3.54**		**C1/96**	**2.31G**
F22LV10C/Z	**4.09**	**3.95****	**Af/98**	
V750B	**1.93** A28 adapter req'd for PLCC Req's SIMM 14 module		**A6/95**	**2.12**
F1500	**2.84** H44 & T44 adapters req'd for PLCC & TQFP Req's SIMM 23A module		**B7/95**	**2.24A** TQFP : used PA1500SG-QFP adapter from Logical Systems
F1500A	**3.7** H44 & T44 adapters req'd for PLCC & TQFP Req's SIMM 23A module		**A/97**	**2.32G** Supports 44-pin PLCC
V2500B	**1.95** A44 adapter req'd for PLCC Req's SIMM 14 module		**A6/95** TOP adapter req'd for V2500/B	**2.14D**
F1504AS	**3.99** Req's modified SIMM 23 module Please contact EPLD App's or Needham's for instruction.			
F750C/CL	**4.07**			
F1508AS	**3.75** 84 PLCC req's 84C adapter 100 PQFP req's PQ100A 160 PQFP req's 160A 100 TQFP req's 100A Req's SIMM 23A module		**BA/97** Supports 84-pin PLCC	**2.36I** Supports 84-pin PLCC

Comments:

* Limited vector support   ** Qualification in progress