

Infineon On-Chip Memory Programming Tool, Version 4 - Release Notes

Current Version: 4.9.0 (03.07.2020)

The Infineon On-Chip Memory Programming Tool 4 (IMT4) is intended to handle the on-chip FLASH and OTP memory devices on Microcontrollers of the XC800, XC16x, XC2000, XMC1000, XMC4000 and TriCore families. According to the capabilities of the respective on-chip memory device the program allows to erase, program, verify and protect the module. To program a memory device one can open an Intel-Hex-File and completely or partly write its contents into the memory device. Infineon Memtool 4 can be used on PC's running Microsoft Windows 2000, Windows XPPro, Windows Vista or Windows 7. The target is connected to the host PC using a standard RS232 port. For XC2000, XMC4000 and TriCore targets also JTAG and DAP communication via Infineon Devices Access Server (DAS) is supported.

Installation

To install Infineon Memtool 4 go to the setup directory and run setup.exe. If you received the program as an single executable file IMT4.exe please run this.

This version of Infineon Memtool 4 includes Infineon Devices Access Server V7.1.8.

Supported operating systems:

- Microsoft Windows™ Vista
- Microsoft Windows™ 7 (32-bit (x86) or 64-bit (x64) versions)
- Microsoft Windows™ 8.1 (32-bit (x86) or 64-bit (x64) versions)
- Microsoft Windows™ 10 (32-bit (x86) or 64-bit (x64) versions)

Please Note:

You need administrator permissions to install the program.

Supported Controller Families

This version provides support for programming on-chip FLASH memory devices on target systems based on controllers of the following families:

- XC16x
- XC2000/XE166
- XC2000M/XE166M
- XC2000N/XE166N
- XC2000H/XE166H
- TriCore
- XC800
- XMC1100
- XMC1200
- XMC1300
- XMC1400
- XMC4100
- XMC4200
- XMC4300
- XMC4400
- XMC4500
- XMC4700
- XMC4800

Supported On-Chip Memory Devices

- XC161CJ/161CS/164CS/167CI-8/16/32F Program FLASH (ES-AA, ... BA step)
- XC164CM-4/8F Program FLASH
- XC164S/D/N-8/16F Program FLASH
- XC2200/XC2300/XC2700/XE166x Program FLASH
- XC2200M/XC2300A/XC2705X/XC2706X/XE166xM Program FLASH
- XC2200N/XC2300B/XC2704X/XE166xN Program FLASH
- XC2200H/XC2300C/XC2707X/XE166xH Program FLASH
- XC2200L/XC2300D/XC2703X/XE166xL Program FLASH
- XC2200U/XC2300S/XC2702X/XE166xU Program FLASH
- XC2200I/XC2300E/XC2708X/XE166xI Program FLASH
- XC866-2/4F Program and Data FLASH
- XC886/888-6/8F Program and Data FLASH
- XC878-9/13/16F Program and Data FLASH (preliminary, no verify available)
- TC1796 Program and Data FLASH
- TC1766/1762/1764 Program and Data FLASH
- TC1161/62/63/64/65/66 Program and Data FLASH
- TC1797/1767 Program and Data FLASH
- TC1197/1167 Program and Data FLASH
- TC1782/1784 Program FLASH and Data FLASH
- TC1724/1728 Program FLASH and Data FLASH
- TC1736 Program and Data FLASH
- TC1387/1367 Program and Data FLASH
- TC1798/TC1793/TC1791 Program and Data FLASH
- XMC1100 Program FLASH
- XMC1200 Program FLASH
- XMC1300 Program FLASH
- XMC1400 Program FLASH
- XMC4100 Program FLASH
- XMC4200 Program FLASH
- XMC4300 Program FLASH
- XMC4400 Program FLASH
- XMC4500 Program FLASH
- XMC4700 Program FLASH
- XMC4800 Program FLASH
- TC2D5 Program and Data FLASH
- TC27x A/B/C/D-Step Program and Data FLASH
- TC26x A/B-Step Program and Data FLASH
- TC29x A/B-Step Program and Data FLASH
- TC23x Program and Data FLASH
- TC22x/TC21x Program and Data FLASH
- TC39x A-Step Program and Data FLASH
- TC38x A-Step Program and Data FLASH
- TC39x B-Step Program and Data FLASH
- TC35x A-Step Program and Data FLASH
- TC37x A-Step Program and Data FLASH
- TC36x A-Step Program and Data FLASH
- TC33x A-Step Program and Data FLASH
- TC3Ex A-Step Program and Data FLASH

Supported external Memory Devices

Infineon Memtool 4 doesn't support programming external memory devices.

Supported Communication Devices / Interfaces

- Standard PC serial port
- Infineon MemTool V4.09.00

- Standard USB to RS232 converters (available as COMx port within Windows)
- Infineon Device Access Server (DAS) using a USB/JTAG interface (wiggler)

Revision History

V4.9.0 (03.07.2020)

- TC3 UCB programming: Allow boot address in cached PFLASH region.
- TC3 FLASH programming: Connect problem with protected UCB_BMHD0 in bootstrap loader mode fixed.

V4.8.2 (21.04.2020)

- XMC1000 BMI programming: Problem with custom BMI mode values fixed.
- Preliminary support for TC3Ex added.

V4.8.1 (11.10.2019)

- XC16x/XC2000 FLASH programming: Broken FLASH protection support fixed.
- TC3xx bootstrap loader configuration files added.

V4.8.0 (27.09.2019)

- Aurix/2G: Optionally initialize on-chip RAMs required for FLASH programming.
- Fixed problem connecting Aurix2G devices with high ESR0CNT value set.
- DAS setup 7.1.8 included (Win32/Win64)

V4.7.9 (18.04.2019)

- TC36x A-Step support added (preliminary).
- TC33x A-Step support added (preliminary).

V4.7.8 (18.12.2018)

- DAS setup 7.0.6 included (Win32)
- TC37x A-Step support added (preliminary).
- TC3xx: Prevent unwanted complete erase of UCBs.

V4.7.7 (03.08.2018)

- DAS setup 7.0.5 included (Win32)
- TC35x A-Step support added (preliminary).

V4.7.6 (30.03.2018)

- TC39x B-Step support added.

V4.7.5 (10.11.2017)

- TC27x support: Function 'Safe BMI header handling' switched off by default.

V4.7.4 (20.10.2017)

- TC27x/TC39x support: Test empty function corrected.
- TC38x A-Step support added.

V4.7.3 (11.11.2016)

- DAS setup 6.0.0 included
- TC39x A-Step support added.

V4.7.2 (29.01.2016)

- XMC4300 series support added
- TC27x support: Allow to open locked debug interface on connect.

V4.7.1 (04.12.2015)

- Dialog-based Aurix UCB programming added
- XMC4100 ASC/BSL problem fixed
- Cfg files for new TC2x7 application kits added

V4.7.0 (30.09.2015)

- DAS setup 5.0.0 included
- XMC4700 series support added
- XMC4800 series support added
- XMC1400 series support added
- XMC1000 / XC2000LE/ULE programming:
 - User interface: Menu / Device / Boot Mode added
 - Program function: Option 'Set boot mode after program' added

V4.6.5 (19.01.2015)

- Fix: Workaround for XMC4xxx/XMC1xxx ASC BSL connection via OnBoard VCOM and latest firmware.

V4.6.4 (10.12.2014)

- DAS setup 4.6.0 included
- Aurix FLASH programming: Display of DFLASH protection status corrected.
- TriCore TC17x7/x8 FLASH protection: Handling of PROCON0.DFEXPRO corrected.

V4.6.3 (19.09.2014)

- Aurix UCB programming: Memory device 'UCBs' introduced for simplified initial programming of UCBs.
- TC22x/TC21x support added

V4.6.2 (05.08.2014)

- Aurix UCB programming: UCB_OTP and UCB_DBG support added.
- Aurix UCB programming: New functions 'Read UCB and save to hex file' and 'Load hex file and write to UCB' added.
- Make connect method to XMC1000 via UDAS more stable.

V4.6.1 (01.07.2014)

- DAS setup 4.5.0 included
- TC26x B-Step / TC29x B-Step support added
- Aurix FLASH programming: Handle all 8KB DFLASH sectors separately now.

V4.6.0 (30.05.2014)

- Aurix UCB programming added

V4.5.11 (10.02.2014)

- DAS setup 4.4.2 included
- TC27x C-Step support added
- TC23x support added

V4.5.10 (27.08.2013)

- TC29x support added
- XMC4000 protection support added

V4.5.9 (10.07.2013)

- XMC1000 Boot Kit *.cfg files added
- XMC4500 Relax Kit *.cfg files added
- Workaround for TC27x ED B-Step/TC26x ED bootstrap loader problem added.

V4.5.8 (16.05.2013)

- TC27x B-Step bootstrap loader support added

V4.5.7 (14.03.2013)

- DAS setup 4.3.0 included
- TC27x B-Step support added (DAS only)

V4.5.6 (11.02.2013)

- DAS setup 4.2.1 included

V4.5.5 (10.01.2013)

- XMC1100 series support added
- XMC1200 series support added
- XMC1300 series support added
- XMC4500/4400/4200: Support for ASC bootstrap loader added.
- XMC1100/1200/1300: Support for ASC bootstrap loader added.
- XMC1100/1200/1300: Support for ASC bootstrap loader via DAP miniWiggler added.
- TC275 A-Step: BMI header CRC check added.

V4.5.4 (23.10.2012)

- TC275 A-Step: Support for ASC bootstrap loader K-Line mode corrected.

V4.5.3 (14.09.2012)

- TC275 A-Step: Use 'Safe BMI Header Handling' in bootstrap loader mode by default.

V4.5.2 (10.08.2012)

- XMC4400 series support added
- XMC4200 series support added
- Bugfix: TC1798/93/91 FLASH read protection support corrected.
- Always show 'Please reset target' message after successful protection operation.

V4.5.1 (03.07.2012)

- TC275 A-Step support: Problem with BMI header handling corrected.

V4.5.0 (01.06.2012)

- TC275 A-Step support added

V4.4.1 (16.04.2012)

- DAS setup 4.0.5 included
- TC2D5 support added

V4.4.0 (25.11.2011)

- XMC4000 support added

V4.3.5 (08.11.2011)

- Bugfix: XC2000 FLASH Protection installation problem fixed.
- Bugfix: Time stamp generation difference between file and window fixed.

V4.3.4 (25.07.2011)

- DAS setup 3.3.1 included
- Bugfix: TC1782 ASC/BSL problem corrected
- TC1724/28 support added

V4.3.3 (11.02.2011)

- DAS setup 3.3.0 included
- Workaround for XC2000ULE FLASH programming problem added

V4.3.2 (16.12.2010)

- Bugfix for XC2000LE/ULE UART-over-SPD bootstrap loader mode
- New XC2000H types added

V4.3.1 (22.11.2010)

- DAS setup 3.2.3 included
- XC2000LE/ULE: Support for bootstrap loader communication via DAS server added (UART-over-SPD mode)
- XC2000I support added

V4.3.0 (09.09.2010)

- DAS setup 3.0.0 included
- TC1791/93 support added
- XC2000LE/ULE support added

V4.2.2 (11.03.2010)

- TC1736 Easykit support added
- DAS setup 2.9.2 included

V4.2.1 (18.09.2009)

- XC2000: FLASH protection handling corrected
- DAS setup 2.9.0 included (DAP wiggler support)
- TC1782/83 support added

V4.2.0 (01.07.2009)

- Automatic COM port detection for Infineon Starterkit and Easykit boards
- TC1797/67 on-chip FLASH protection support added
- XC2000/XC2000M FLASH programming: Changed to handle 4KB physical sectors instead of logical sectors.
- XC2000N/XE166xN support added
- XC2000H/XE166FH support added

V4.1.5 (10.02.2009)

- TC1167/97 support added
- DAS setup V2.7.1 included with IMT4 setup

V4.1.4 (16.07.2008)

- TC1767/97 ASC/BSL support added (preliminary)

V4.1.3 (07.05.2008)

- Improved editor for protection passwords
- DAS setup V2.6.4 included with IMT4 setup
- XC2000M/XE166M support introduced

V4.1.2 (28.04.2008)

- XC878 added (preliminary, no verify available)

V4.1.1 (13.02.2008)

- BUGFIX: XC2000 sector write protection bug fixed
- Improved handling of partly protected controllers/FLASHs
- DAS setup V2.6.1 included with IMT4 setup
- TC1767/97 added (DAS/JTAG)

V4.1.0 (31.10.2007)

- BUGFIX: XC888-6, start address of D-FLASH bank 0 corrected
- XC2786/66-96F added
- JTAG communication support via DAS added (XC16x, XC2000, TriCore)

V4.0.4 (20.06.2007)

- XC2365-48F, XC2365-56F, XC2365-72F, XC2387-72F added

V4.0.3 (31.10.2006)

- XC2000 support introduced (XC2287)

V4.0.2 (14.06.2006)

- XC800 support introduced

V4.0.1 (03.11.2005)

- minor bug fixes

V4.0.0 (26.10.2005)

- Initial release version of IMT4, functionally based on IMT3
- C16x on-chip FLASH memory devices not supported anymore