

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

Current Version: 4.8.1 (11.10.2019)

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.

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V4.0.2 (14.06.2006)  
V4.0.1 (03.11.2005)  
V4.0.0 (26.10.2005)

## 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

Supported external Memory Devices

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

## Supported Communication Devices / Interfaces

Standard PC serial port

Standard USB to RS232 converters (available as COMx port within Windows)

Infineon Device Access Server (DAS) using a USB/JTAG interface (wiggler)

## Revision History

V4.8.1 (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 ESROCNT 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