

TASKING VX-toolset for ARM Cortex v5.0r1

Release Notes

Scope

These release notes cover the changes between v4.4r1 and v5.0r1 of the TASKING VX-toolset for ARM Cortex.

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New in v5.0

This section gives an overview of the most important new features and improvements in v5.0 (compared to v4.4r1). See the section with [fixed issues](#) for a complete list.

Core Support

Support has been added for the following core:

- Cortex-M0+

Device Support

Support has been added for the following device families:

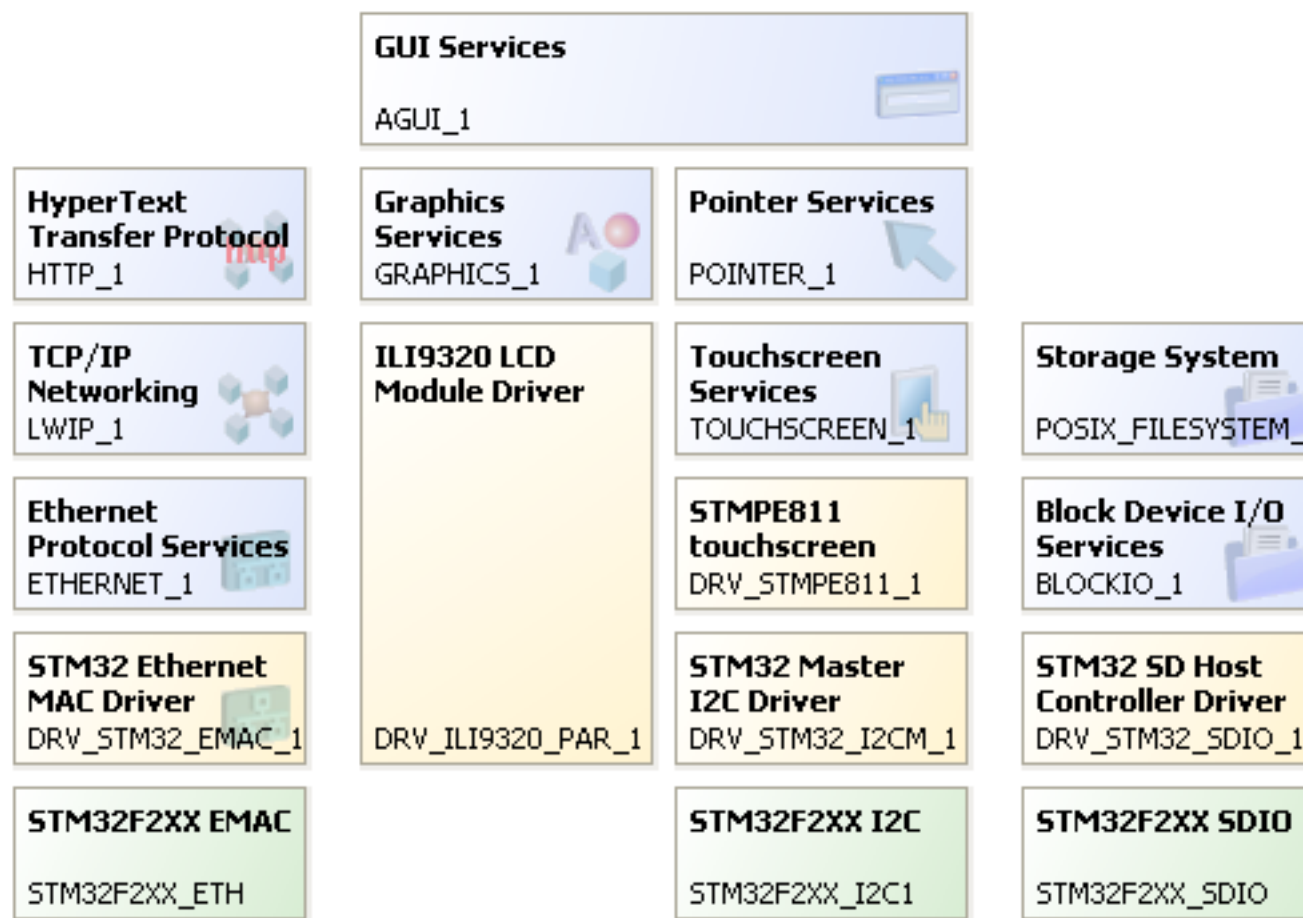
- Freescale Kinetis MK60D10
- Infineon TLE9879
- Silicon Laboratories Zero Gecko EFM32ZG
- STMicroelectronics STM32F030
- STMicroelectronics STM32L100
- STMicroelectronics STM32F401
- STMicroelectronics STM32F429
- STMicroelectronics STM32F439

Support has been added for the following evaluation boards:

- Freescale TWR-K60D100M
- Infineon TLE987x 3Phase board
- Silicon Laboratories Giant Gecko Development Kit
- Silicon Laboratories Leopard Gecko Development Kit
- Silicon Laboratories Wonder Gecko Development Kit
- Silicon Laboratories Wonder Gecko Starter Kit
- Silicon Laboratories Zero Gecko Starter Kit
- STMicroelectronics STM32052B-EVAL
- STMicroelectronics STM324x9IG-EVAL
- STMicroelectronics STM32F4 Discovery Kit

With a Software Platform you can quickly create full-featured applications. A Software Platform is made up of software blocks, pieces of functionality that you can use in your application, like RTOS facilities, peripheral access or software protocols. The exact contents of a Software Platform depend on the need of your application.

The Software Platform Builder is used to manage your Software Platform. It is both a graphical editor and a code generator. Collections of software modules are delivered as [Software Platform repositories](#).



Graphical representation of a Software Platform in the Software Platform Builder

TASKING Software Platform is supported in the Premium edition of the toolset. With the Standard and Professional editions you can still get an impression of the possibilities of TASKING Software Platform, because all editions allow you to import and build the included Software Platform examples. You can import Software Platform sample projects via the Import wizard in the ARM Eclipse IDE.

1. From the File menu, select Import. The Import dialog appears.
2. Select TASKING Software Platform » Example Projects and click Next. The Import Software Platform Examples dialog appears.
3. Select the Software Platform examples you want to import into the current workspace and click Finish.

The original examples are copied into the current workspace and the Software Platform sources are generated. Once the examples are in your workspace you can build the projects.

For more information about using TASKING Software Platform, see the Introduction to the Software Platform for ARM guide.

Check for updates

Altium provides a download site for updates to the ARM Eclipse IDE. This is primarily intended for updates to fast changing components such as the Software Platform Repository. You can update your installation by using the Available Updates wizard.

To check for updates:

1. From the Help menu, select Check for Updates. The Available Updates wizard appears.
2. Follow the steps in the wizard and click Finish.

License Management

The TASKING VX-toolset for ARM now uses the TASKING License Management system. The Getting Started guide provides detailed information about this.

Software Platform Repository

TASKING POSIX Implementation

TASKING POSIX implementation (PSE51) supports:

- Multi-threading
- Standard device I/O
- Standard file I/O (PSE52)
- Standard device Shared Memory routines
- File system interface for accessing sockets (PSE53)
- File system interface for accessing shared memory objects
- Basic support for message passing (PSE52)
- Basic support for signals
- FAT File System

For a detailed description of TASKING's implementation, see *TASKING POSIX Implementation*.

Some features have limited functionality for devices without peripheral support.

Other Software

The following software is provided as Bonus Technology as described in the Altium EULA. Some third-party software is included which may require special license agreements. Check the generated code for the exact license usage conditions.

USB Host support:

- hid - Human Interrupt Devices profile to support USB mice and keyboards
- uvc - Universal Video Class profile to support USB Webcams
- hub - Profile to support connection of up to one USB HUB
- msd - Mass Storage Device profile to support USB memory sticks
- netw - Networking profile with support for a range of USB Wi-Fi devices from Ralink/MediaTek
- hci - Host Controller Interface profile to support USB Bluetooth dongles

Other services:

- Graphics Services
- Graphics User Interface
- JPEG encoder / decoder
- HyperText Transfer Protocol Client & Service
- HTTP Secure (MatrixSSL)
- TCP/IP Internet protocol suite (lwIP)
- JSON Parser (yajl)
- Bluetooth Human Interface Device and RFCOM profiles

Software Platform peripheral support is included for the following device families:

- STMicroelectronics STM32F2xx
- STMicroelectronics STM32F10x
- STMicroelectronics STM32F30x
- STMicroelectronics STM32F37x
- STMicroelectronics STM32F4xx (no FP support)
- STMicroelectronics STM32L1xx

Peripheral support includes the STMicroelectronics Standard Peripherals Library, licensed under MCD-ST Liberty SW License Agreement V2.

Fixed issues for v5.0r1

New Features

- [101-38730](#) - Support for Interrupt Aware debugging using ST-link

Improvements

- [101-37416](#) - Update ST library to v2.0

Problems

- [101-37714](#) - Slow build when using a floating license on Windows 7
- [101-38261](#) - Flexlm activating borrow requires all components to be run once in order to work
- [101-38679](#) - DAVE Import wizard fails for XMC1xxx and XMC42xx
- [101-38725](#) - Binaries do not run on AMD processors
- [101-38756](#) - Cannot locate constant variables in ROM with value zero

You can find the list of [open issues for v5.0r1](#) on the internet.

License Information

TASKING products are protected with TASKING license management software. You need a license key when you install a TASKING product on a computer. When you order a TASKING product from Altium or one of its distributors, a license key will be sent to you by email or on paper.

See the Getting Started with the TASKING VX-toolset for ARM guide for information on obtaining a license.
