STM32-JAVA

Fully-integrated Java development environment and solution for STM32 MCUs

Data brief

Features

A single DVD-ROM incorporating:

- STM32Java Software Development Kit built on MicroEJ® , extending the Eclipse™ IDE,

- Several Java Platforms (JPFs) for STM32: Quick Start JPFs and Production JPFs,

- JPFs can be extended to support specific hardware of the application board,

- Embedded (EmbJPF) and Simulation (SimJPF): the very same Java binary code functionally validated on the SimJPF runs on the sibling EmbJPF,

- MicroUI (Micro User Interface) and MWT (Micro Widget Toolkit) graphical libraries.
  - Targets all major graphical display buffer organizations, monochrome and full color displays,
  - Event engine to handle very efficiently and at high speed haptic sensor drivers: buttons, rotary switch, joystick, touch panel, etc.

- Tools included:
  - Font designer to design fonts in many ways,
  - Story Board designer to quickly specify possible human-machine interaction with the application,
  - Front Panel designer to extend the Java platform simulator.

- Very small and efficient Java virtual machine:
  - Flash: less than 30 KB
  - RAM: less than 1.5 KB
  - Startup time: less than 2 ms at 120 MHz

- 1-year subscription, with hardware dongle.

Description

Take advantage of the benefits of object-oriented programming in Java to develop general purpose STM32 applications, in particular, applications with a smartphone-like look and feel graphical user interface (GUI) with STM32Java.

All of the well known advantages of the Java design concepts are available: interface versus implementation, inheritance and composition, polymorphism, garbage collector (GC), multi-tasking, etc.

Software productivity, agility, scalability and security are improved compared to traditional developments in C/C++ code.

Applications can mix C code (legacy control/command code for example) with code developed in Java. STM32Java provides efficient mechanisms to interface the 2 worlds, Simple Native Interface to call C functions from Java code and Shielded Plug to exchange data between the 2 worlds.

STM32Java provides everything required to easily and very quickly develop feature-rich GUIs, relying on the Model-View-Controller (MVC) triad, the best known solution to designing flexible and easy to maintain GUIs.

For further information contact your local STMicroelectronics sales office.

www.st.com

Running STM32Java programs requires features that are embedded on special STM32 MCU series. There are two sets of special part numbers enabled for Java:

● MCU part numbers ending with the letter 'J' (for mass production)

● MCU part numbers ending with the letter 'U' (can only be ordered as samples)

For more information, visit www.stm32java.com.

1 Ordering information

STM32-JAVA can be ordered from your nearest ST distributor or sales office.

ST order code: STM32-JAVA.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
14-Dec-2012	1	Initial release.
28-Jan-2013	2	Added part numbering marking information in *Description*.

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