

STM32Java



Presentation

What is STM32Java?

Why Java on a microcontroller

Typical markets for embedded Java

STM32Java offer

Cost of the STM32Java offer

Further information and access to STM32Java

What is STM32Java?

3

- STM32Java is a complete solution to develop and deploy applications on STM32 microcontrollers using Java technologies
- This solution was developed by 2 partners
 - **STMicroelectronics**: semiconductor company
 - **IS2T**: software editor (embedded Java solutions provider)
- STM32Java
 - **Simplifies software development**: object oriented programming and easy prototyping
 - **Speeds time to market**: Java roughly divides by 5 software development time
 - **Brings into play new talents**: Millions of skilled Java developers worldwide



Why Java on a microcontroller

4

- Object oriented language and a virtual machine
 - Software is easier to maintain
 - Perfect fit for embedded graphics applications
- Implementation ensures application memory footprints similar to C
 - Virtual machine: 30-Kbyte ROM, 1.5-Kbyte RAM
- Seamless integration with C to enable reuse of legacy code
- Garbage collector mechanism solves memory leaks problems
 - Removes roughly 40% of bugs seen with C
- Ubiquity: Java is everywhere, so simulation on a PC is easy

Typical markets for embedded Java

5



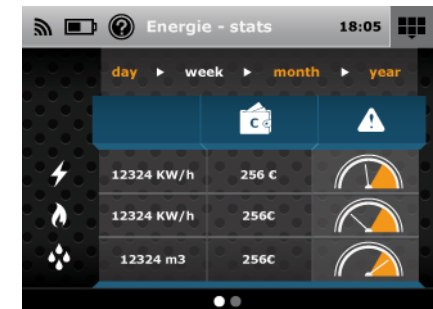
Consumer

- Kitchen equipment (cookers, ovens, washing machines)



Home appliances

- Comfort (heating)
- Security (alarms, access control)



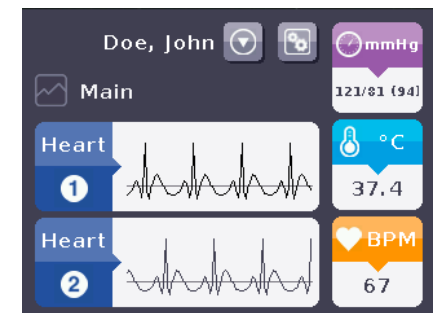
Industrial

- Automation



Metering

- Smart metering



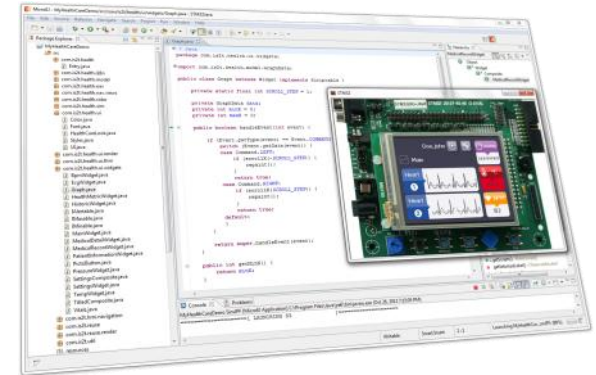
Healthcare

- Body control equipment

STM32Java offer

6

- Dedicated STM32 part numbers enabled for Java
 - Part numbers ending with the letter U for sampling (example: STM32F417IGT6U)
 - Part numbers ending with the letter J for production (example: STM32F407IGT6J)
- A set of STM32 embedded software
 - Java Virtual Machine with standard libraries
 - Board support packages
- A set of tools to ease software development
 - STM32Java SDK, OEM version of MicroEJ SDK from IS2T (Eclipse-based)
 - On-PC simulator for easy prototyping
- Special tools for graphical user interfaces
 - Tools for graphics: panel designer, story board designer, font designer
 - A set of libraries for embedded graphics: widgets, fonts, images, and more

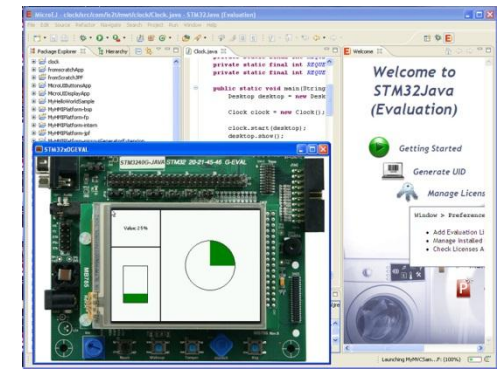


Cost of the STM32Java offer

7

- For evaluation

- STM32Java SDK 3-month limited evaluation version
 - Free download at www.stm32java.com
- Kits with an evaluation board and a DVD-ROM
 - **STM3220G-JAVA** with an STM32F2 series evaluation board
 - **STM3240G-JAVA** with an STM32F4 series evaluation board



- For development

- **STM32-JAVA**, One year STM32Java SDK license at US\$ 2600, with maintenance and support



Further information and access to STM32Java

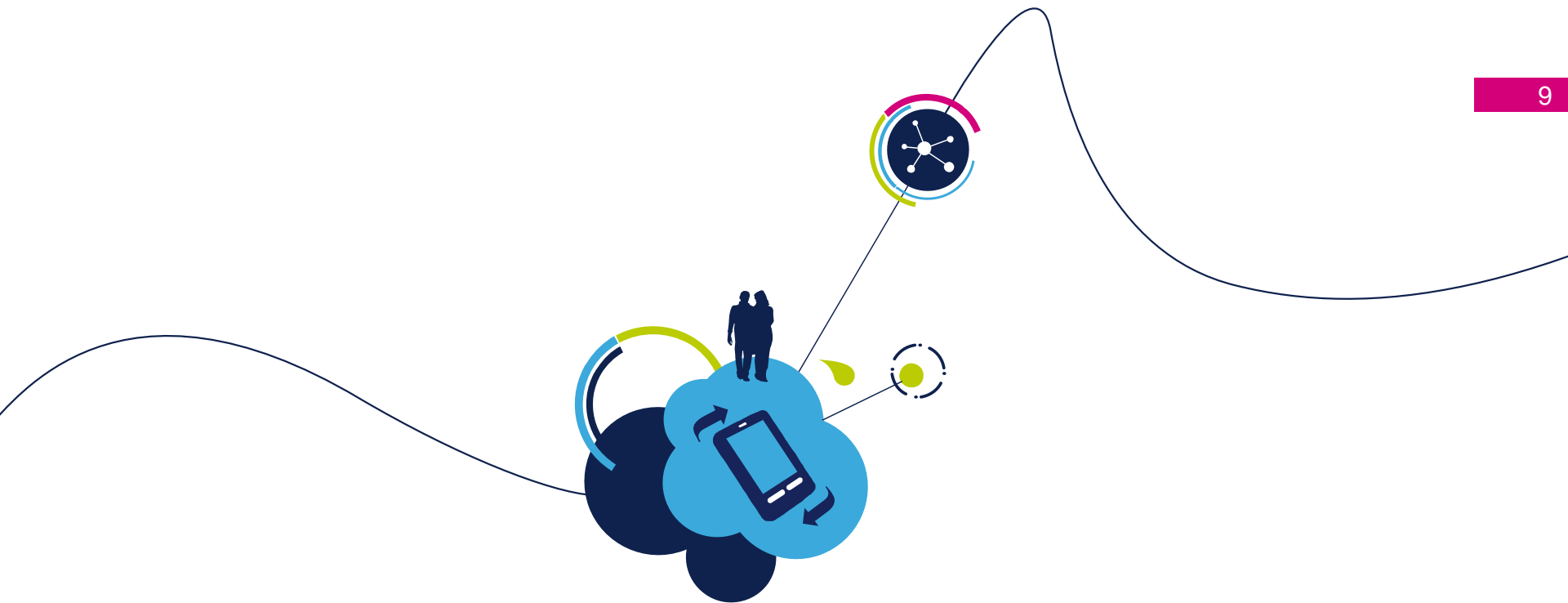
8

On www.st.com

- www.st.com/stm32-java
- www.st.com/stm3220g-java
- www.st.com/stm3240g-java

On dedicated web site

- www.stm32java.com
- support.stm32java@microej.com



Thank you