• Java SE 6 Compatible

• 2D/3D Graphics

• Demanding Visualization with AWT, Swing, and OpenGL

• Hard Realtime down to a few µs

• Optimized for Limited Resources

• Reduce Your Time to Market

• Increase Your System Robustness
Key Technologies

Hard Realtime
The JamaicaVM offers full Java functionality for hard realtime environments with response times well under 1ms achievable.

Realtime Garbage Collection
JamaicaVM is the world’s only VM with a fully deterministic, self-pacing Garbage Collector, achieving low GC delays of only a few μs.

Real-Time Specification for Java (RTSJ)
As one of the first vendors on the market, aicas has supported the RTSJ for years. Using the RTSJ, portable interrupt handlers and device drivers can be written in Java.

Safety Critical Support
Certifiable for IEC 61508.

Small and Fast
The JamaicaVM is equipped with a highly optimized static compiler and a profiler. The tradeoff between runtime performance and code size can be chosen freely.

Dynamic Loading
The JamaicaVM enables dynamic class loading for upgrading applications at runtime.

Powerful Tools
The JamaicaVM offers extensive tools that allow analyzing, running, and optimizing your applications.

Remote Debugging
Applications running on a target system can be debugged with standard IDEs such as Eclipse and NetBeans.

ROMable Code
Java applications and resources can be stored in a single executable binary in ROM.

Interoperability

Available for Many Operating Systems
The JamaicaVM is available for a multitude of operating systems and is portable to any RTOS. Currently supported are Integrity, ITRON, Linux, Linux/RT, MacOS, NeOS, PikeOS, QNX, RTEMS, Solaris, ThreadX, VxWorks, and Windows CE.

Available for Most 32 and 64 Bit Processors
For example, ARM, Blackfin, ERC32, PowerPC, SH3/4, Sparc, XScale and X86 are supported.

Open Standards
Standards compliance is paramount at aicas. Whether using JNI, RTSJ, RMI or J2SE, your existing Java applications will run with the JamaicaVM. Many additional Java libraries, including implementations for XML, OSGi, Corba and web services, increase productivity for embedded Java development. The aicas tool set seamlessly integrates into Eclipse and other development environments.