PRODUCT BRIEF

QNX Momentics Tool Suite

Flexible Eclipse-based IDE for maximum insight into system behavior with innovative profiling tools to slash debug times and accelerate optimization of complex embedded systems.

Comprehensive and tightly integrated, the QNX® Momentics® Tool Suite has everything developers need to quickly build and optimize applications for the QNX Neutrino® Realtime Operating System (RTOS). From board bring-up to remote diagnostics, the QNX Momentics Tool Suite provides time-saving tools for the entire development cycle, all in a single, easy-to-use environment.

Familiar Development Environment

Developers can ramp up quickly because QNX Neutrino looks and feels like Unix. Develop, debug, analyze and optimize from a common tool set. A unified Eclipse-based IDE provides well-defined interfaces to ensure that tools work together seamlessly. All tools share the same look and feel, so developers only need to learn one user interface.

Gain Design Flexibility

The QNX Momentics Tool Suite lets development teams determine the best target platform for a project; as well as the best host and programming language to suit their skills and preferences. With the QNX Momentics Tool Suite, developers have the flexibility to work with a mix of languages and processor architectures simultaneously.

Developers also benefit from an open, extensible platform for tool integration supported by a large and rapidly growing community of tool vendors and developers. They can download third party tools via the Eclipse Marketplace or build custom plug-ins using the industry-standard Eclipse framework.

Built-in Quality and Security

Leverage profilers, code coverage, memory and runtime analysis tools for building the most robust, secure and reliable embedded systems possible.

Accelerate Development Cycles

Shorten product development cycles and meet aggressive shipment schedules. The QNX Momentics Tool Suite provides a number of productivity and quality analysis tools to accelerate all phases of product delivery. Wizards let developers quickly and easily create projects, make and maintain target images with the system builder, and highlight exercised source code paths for quality assurance testing using the code coverage tool.
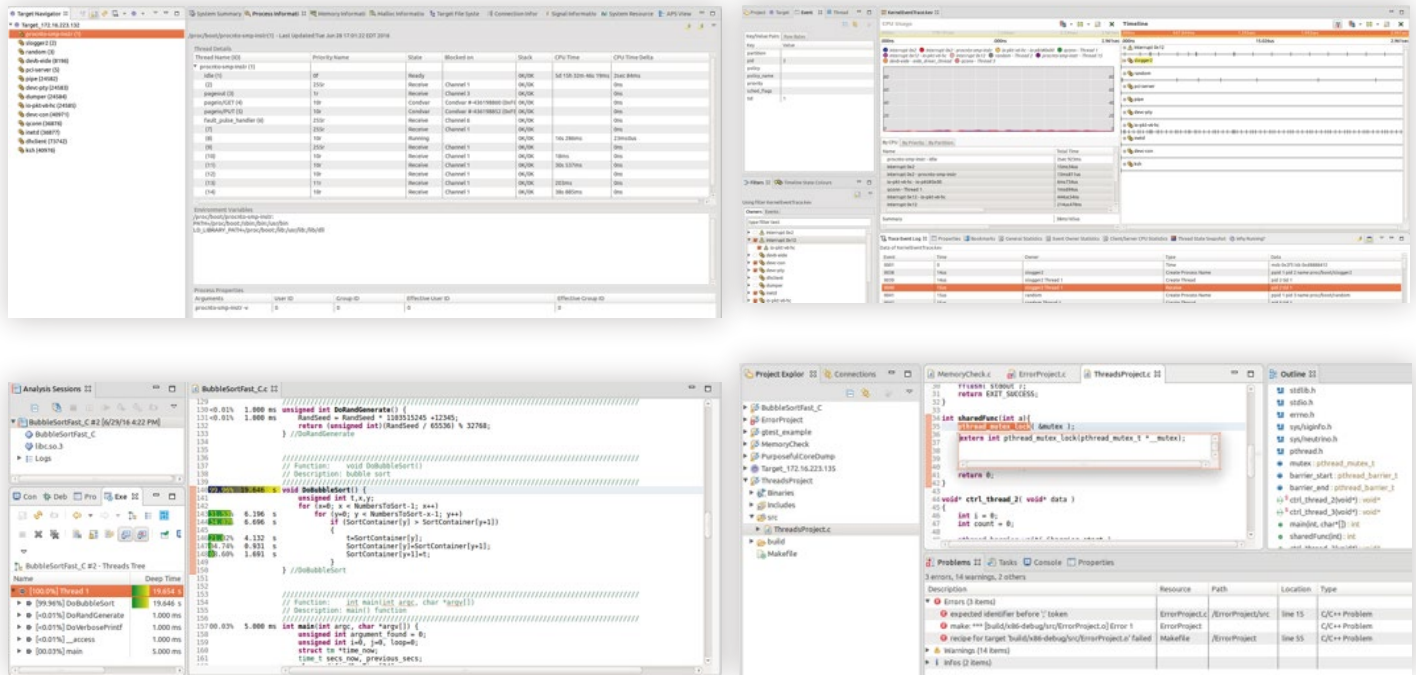
Optimize System Resources

The QNX Momentics Tool Suite's unique tool set not only facilitates debugging but also performance optimization. Tools such as the system profiler and application profiler let developers pinpoint where — in both single-core and multi-core systems — optimizations that will most improve performance. While tools such as the code coverage tool and Valgrind provide everything necessary for building the most robust and reliable embedded systems possible.

Integrate Advanced Technology

Access proven technologies and tools to enhance and customize products for competitive differentiation — all in a convenient development kit. The QNX Momentics Tool Suite supports all QNX Neutrino RTOS technologies, including multi-core, extended networking, flash filesystems, advanced graphics, and transparent distributed processing.

QNX Software Center

The QNX Software Centre provides a secure, centralized repository for discovery, delivery and installation of all QNX software. QNX developers are pro-actively alerted when security updates, patches and product updates become available and can easily manage dependencies, software baselines and open source compliance.

The QNX Momentics Tool Suite provides productivity and quality analysis tools that accelerate all phases of product delivery.

The QNX Momentics Tool Suite at a glance

Fully Integrated IDE
- Based on open Eclipse framework
- Support for Eclipse Marketplace
- Manage and control source
- Edit & Compile
- Debug on host or target
- Unit test
- Ensure code coverage
- Profile Memory
- Detect runtime errors
- Build target images
- Monitor targets

Familiar Development Environment
- C11 and C++14 support
- HTML5, QT, Python, Perl
- GCC compiler
- GDB debugger
- Valgrind Runtime Error Detection
- Looks and feels like Unix

Intuitive and Secure Software Updates
- Software delivery integrity
- Centralized discovery, delivery and dependency management
- Improved artifacts for open source licensing compliance

Multiple Development Hosts
- Windows
- Linux
- macOS

Board Support Packages
- Support for the latest ARMv8 and x86-64 processors
- Continued 32-bit support for ARMv7 and x86

Documentation
- Example projects, context-sensitive help, and online manuals

About BlackBerry QNX

BlackBerry QNX, is a leading supplier of safe, secure, and trusted operating systems, development tools, and professional services for connected embedded systems. Global leaders such as Ford, Audi, Cisco, General Electric, Lockheed Martin, and Siemens depend on BlackBerry QNX technologies for their next generation of secure vehicle software platforms, network routers, medical devices, industrial automation systems, security and defense systems, and other mission and/or life-critical applications. This includes full software lifecycle management via secure over the air software updates. Founded in 1980, BlackBerry QNX is headquartered in Ottawa, Canada, with its products distributed in over 100 countries worldwide.

::: BlackBerry | QNX