MENTOR EMBEDDED
Linux

Mentor® Embedded Linux®

Partner Ecosystem

Eclipse-based IDE | Integrated MEL ADE | Qt® Graphics Analysis Tools | GStreamer Analysis Tools

Kernel Module Development

Kernel & Userspace Analysis Tools

Debugger

Sourcery™ CodeBench

Mentor Embedded Linux Components

Qt® Graphics | Fastboot Toolkit | **Industrial Profile** | **Security Profile**
Multicore Framework | | PRE_EMPT RT | SELinux
Optimized Runtime Libraries | 1500+ Linux Recipes | CAN bus | SMACK
Toolchain | | Modbus | Wurldtech Achilles Certified
| BitBake Build System | OPC-UA |
Linux® Kernel | | Ethernet/IP | yocto PROJECT COMPATIBLE
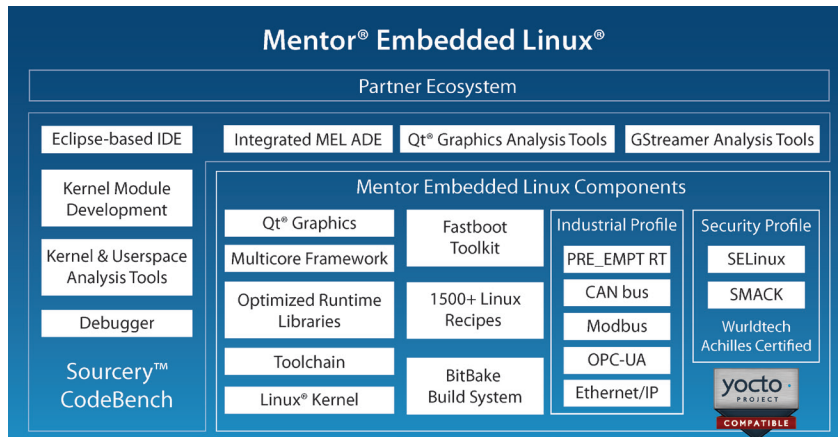
Mentor Embedded Linux (MEL) is a commercially supported, extensible, and customizable platform enabling value-add differentiation.

Streamlines Platform Creation and Application Development, Allowing you to Focus on Value-add Differentiation

As embedded Linux® continues to gain adoption in the embedded industry, companies are finding it increasingly more costly to manage their distributions, tools, and applications across the enterprise in a cost-effective manner. Because teams working on multiple projects can easily leverage the availability of open source modules, applications, and patches the various development trees quickly diverge, resulting in an inefficient and costly business predicament. Mentor® Embedded Linux® is a commercially supported, extensible, and customizable platform that scales across projects to enable project teams to quickly and efficiently scale productivity. It is ideally suited for the industrial, medical, networking, and mil/aero industries.

Commercial Platform

Mentor Embedded Linux provides a solution that fully empowers developers to create their own unique Linux-based products while leveraging a commercial Linux platform that is enhanced with differentiated features, commercially tested, and integrated with powerful tools. Mentor Embedded Linux is a system integration tool that assists users in assembling a software platform and development environment that meets specific product requirements – out of the box. Mentor Embedded Linux is a powerful framework based on technology from the Yocto™ Project that creates Linux distributions for different processors in an automated and reproducible manner directly from validated source code. The platform eases the burden of cross-compiling many hundreds of packages for your custom embedded platform.

Extensible

The Mentor Embedded Linux commercial platform is standards-based, and therefore, easily extensible. Mentor Embedded Linux is based on the industry standard Yocto Project, with a familiar build environment and tools. In addition, since Linux has become the de facto standard for most hardware and software suppliers, Mentor Embedded Linux is available across hardware platforms

SOLUTION FEATURES:

- Yocto™ Project-based Linux platform
- Broad hardware support: ARM®, PowerPC®, AMD x86, Intel® x86
- Customizable to meet specific product requirements
- Security team and update process to address critical security defects
- Integrated with Mentor® Embedded Sourcery™ CodeBench to include MEL ADE and Qt® Graphics and GStreamer analysis tools
- Performance-optimized compiler (GCC) and runtimes
- Application and kernel development and debug tools including advanced software insight analysis
- Industry leading quality infrastructure and process
- Extensively tested
- Broad partner ecosystem

BENEFITS:

Reduced risk with increased time to productivity
Provides an integrated, tested, and supported platform that accelerates time to productivity and differentiation

Platform customization
Ensures that developers have total control over their Linux platform

Powerful and integrated development tools
Speeds the process of application development, system-wide debug, and system analysis

Access to Linux experts
Developers have access to the Linux experts at Mentor Embedded Professional Services ensuring that projects move forward to completion

mentor® embedded

making the integration of third-party and open source applications a straightforward process.

Supported by Trusted Linux Experts

Mentor Embedded also serves as a trusted extension to embedded development teams. By leveraging the embedded Linux experts at Mentor, development teams can mitigate risk and maximize the probability of success of their Linux-based embedded projects. Mentor's expert support, training, and professional services include basic support, updates and upgrades, patches to critical security defects, platform extensions, basic and customized training, and long-term support.

Multicore Enabled

Mentor Embedded Linux can run natively or be designed into a system that consolidates multiple heterogeneous runtime environments on today's most advanced system-on-chip (SoC) processors. By leveraging the Mentor® Embedded Multicore Framework, developers can build systems that integrate Mentor® Embedded Linux®, Nucleus® RTOS, and bare metal environments on complex SoC processors with homogenous or heterogeneous processor cores.

Graphics and UI

Mentor Embedded Linux supports 2D & 3D user interface development with the Qt® 5.5 application framework. Enabled with Mentor's Sourcery™ Analyzer visual analysis tool, key UI performance issues such as framerates, response times, and boot time can be visualized and correlated with key system metrics to ensure users get the most from the underlying hardware and that the best UI experience is achieved.

Sourcery CodeBench Integration

Mentor Embedded Linux is built upon the framework of Sourcery™ CodeBench, containing an industry-proven commercial quality toolchain and associated utilities. This

The real value behind Mentor Embedded Linux is that developers get more than just a Linux distribution and BSP.

removes the uncertainty of relying on a free unsupported toolchain. Highlights of Mentor Embedded Linux and Sourcery CodeBench integration include:

– A fully integrated development environment (IDE)

– Access to a performance-optimized compiler and libraries

– Advanced software insight and analysis tools

– Comprehensive debugging at the application, module, and kernel levels

– Support for ARM®, PowerPC®, AMD x86, and Intel®x86

More about Mentor Embedded

The Mentor Graphics® Embedded Systems Division comprises the Mentor Embedded family of products and services, including embedded software IP, tools, and professional services to assist developers and silicon partners to optimize their products for design and cost efficiency.

For the latest product information, call us or visit: w w w . m e n t o r . c o m / e m b e d d e d

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