



## development system

# The Embedded Alley Development System for Linux-based devices

### **Embedded Alley Development System for Linux-based devices**

Based on open source technologies, integrated and optimized for your commercial product

Lessens risk with fewer variables, reducing your total development cost

Minimizes delays in your product's time to market

### **Key Features**

Eclipse-based graphical IDE and easy-to-use command-line development environments

May be rebuilt from source using a preconfigured build system

Kernel source preconfigured to hardware

Fully tested, latest-stable Linux kernel, integrated into build system

License flagging and binary-to-source matching captured in your software bill-of-materials

Access to Embedded Alley Junction for all members of your development project team

### **The full freedom of open source software**

The power and freedom of developing your product with open source software is compelling and well understood. So are the challenges of "going it alone" and working directly in the open source community. With unmatched expertise in leveraging and optimizing open source software for intelligent devices, the engineers of Embedded Alley have a long history of bringing commercial products to market based on open source software. This key experience in bridging the gap between open source and proprietary technologies is the foundation for the Embedded Alley Development System, organized into a cross-development kit, providing the best open source technologies — integrated, optimized and fully supported — so you can build your commercial product efficiently, on time and on budget.

Embedded Alley offers a set of integrated open source software components built into an easy-to-use development environment for board-level port, driver and application development. The Embedded Alley Development System includes cross compilers, a choice of C libraries (glibc or uClibc), debuggers, prepared file system images, and product-specific supporting libraries.

### **The optimal development environment from start to finish**

For building and integration of custom applications to board-level ports, the Embedded Alley Development System provides an environment with release management ready for integration with your own source control system. It arrives optimized and configured to create both development and production flash images. As needed, your product development team can add components and rebuild the entire development system from source.

For source-level debugging, the Development System includes a graphical, Eclipse-based IDE that allows you to step through your source code, scripts and configurations to find the problem quickly. An easy-to-use command line interface is also always available.

The Embedded Alley Development System produces tools and runtime to the your product spec. Our Development System lets you acquire and integrate embedded Linux platform code from Embedded Alley and other project repositories such as kernel.org, and from semiconductor and systems suppliers, whichever is best for the product you're building. Embedded Alley integrates a fully tested, latest-stable Linux kernel into the build system. Kernel source, including configuration files for your unique hardware, is also included.

### **Document your code choices, and options for license compliance**

The Development System now offers Software BoM Creation to fully documents packages, versions, licenses, upstream source, patches and dependencies for both development and production builds; License Auditing to flag Open Source licenses and highlight compliance obligations to match your specified policies; Source Package Creation to build comprehensive device project sources and create source packages tailored to meet licensing disclosure requirements; and Traceability to support tracking and verification of matched sources and binaries for redistribution, license compliance, maintenance and end-product customer support.



# The Embedded Alley Development System

## Development System Specifications

Standard Ubuntu hosting  
(other hosts available)

Latest-stable GNU toolchain, glibc or  
uClibc, and gdbserver

Startup scripts and utilities optimized  
for fastboot, udev, busybox,  
dropbear, network setup and control  
utilities, ppp, mtd-utils

Utilities for testing and test load:  
bonnie++, netperf, crashme

Pre-configured root file system  
images: UBIFS and squashfs flash file  
system for production and NFS root  
file system for development

Test utilities and setup

Documentation, including user guide  
and test plan

## Embedded Alley Junction: a personalized support and collaboration portal for our customers and partners

Embedded Alley Junction integrates customized product delivery, technical support and expertise with knowledge base and community forum. The customer-centric Junction brings together the broad and deep expertise embodied in the Embedded Alley team and the varied outlook and experience of our clients and technology partners. An integral part of the Embedded Alley Development System, the Junction offers device OEMs and embedded Linux ecosystem players a unique destination and conduit for working with Embedded Alley, fostering collaboration and joint development throughout the product life cycle. Highlights include:

- Product distribution, update and source code repositories, tailored to meet subscriber preferences and projects
- On-line documentation and development tips
- Customer support issue tracking (using Bugzilla)
- Frequently-asked questions (FAQ)
- Company, Customer and Partner collaboration Wiki
- Embedded Alley and industry news feeds
- Customer mailing list management and archives
- Customizable member profiles, subscriptions and user interface

## Embedded Alley is your partner in product development

With our strong track record of working with the open source community and its culture, Embedded Alley can work with your team to obtain or create the timely updates required for your product. Having Embedded Alley as your community partner means fewer delays in your product's time to market.

We collaborate closely with you throughout your product life cycle, enabling development, *plus* production and your product deployment. Embedded Alley can provide value at all stages: market knowledge, feasibility, architecture, software design, as well as build systems, test plans, integration support, QA and maintenance.

We take a hands-on approach — in the lab and on-site with our customers (as needed). We always respect your deadlines and your “need for speed.” Whether you purchase the Embedded Alley Development System, or engage us for custom services or training, our problem-solving, collaborative spirit lets us work with your engineers as one team.