X-ES Enterprise Linux (XEL)

① XEL Overview

An Easy-to-Use Software Toolbox

X-ES Enterprise Linux (XEL) is an RPM-based Linux distribution specifically designed for X-ES single board computers. Derived from standard tools and Linux kernel interfaces where possible, XEL provides an extension layer that customers can use to tailor the functionality of our SBCs to suit diverse project needs.

XEL board support packages extend Enterprise Linux variants like Red Hat Enterprise Linux™ (RHEL). XEL adds support for 64-bit X-ES x86 platforms on top of a stable and widely used Linux base platform distribution suitable for deployment in mission-critical applications. XEL also promotes project longevity by making it easier to receive support from upstream vendors.

In short, XEL is software X-ES provides to make our hardware easier and more flexible to use.

Source Code

All X-ES software modifications are open source and made available to the customer under the GNU GPL license via our open-source software portal. X-ES provides source code with each release in source RPM format (SRPM).

XEL & Other Distributions

X-ES provides customers with an XEL repository containing a set of packages that provide support for X-ES hardware. This repository is intended to be used on top of an existing compatible Linux installation.

Our support and testing are centered on Red Hat Enterprise Linux™ and equivalent distributions. Yocto-based Linux board support packages are also available upon request.

② XEL Features

Taking Linux Above and Beyond

X-ES Enterprise Linux supports additional kernel modules/drivers for onboard devices not found in the upstream vendor's distribution, including (but not limited to):

- Network
- Storage

- CPU monitoring
- Sensors

- FPGA
- GPIO

XEL also adds the following features:

- Dynamic kernel module compilation to facilitate kernel upgrades
- Scripts and utilities providing convenience functions for X-ES boards
- Automatic I^2C/SMBus device registration for X-ES single board computers
- Fully tested, validated, and backed by X-ES' industry-leading support