Developing Qt5 applications natively on Wind River Linux

Wind River Linux provides the technologies essential to building a flexible, stable, and secure platform for your embedded devices.

Based on OpenEmbedded releases from the Yocto Project, it is designed to let you customize your platform to include only the packages and features you need. Powered by bitbake, it provides the ability to build an entire Linux distribution from source by following repeatable recipes. This is really powerful, but can be foreign to application developers that already have a workflow they are comfortable with.

Developers building graphical user interfaces (GUI) have their own set of tools that they rely on. Often they prefer to use an Integrated Development Environment (IDE) tailored to the language and frameworks they are working with. Typically this IDE and the tools it uses are running natively on the same platform they are building for.

Fortunately, these developers can still do this on Wind River Linux. This tutorial describes building Wind River Linux with the GCC toolchain and Qt Creator included to enable native application development.

Udoo Bolt Gear mini-PC launches with Ryzen V1000 Udoo Bolt SBC

Seco has launched a $399 ?Udoo Bolt Gear? mini-PC kit built around its Ryzen Embedded V1000 based Udoo Bolt SBC. The $399 kit includes a metal case, 65W adapter, and a WiFi/BT M.2 card.

A growing number of open-spec, community-backed SBCs ship with optional. and in some cases, standard enclosures, but most of these are simple plastic cases. Seco?s new Udoo Bolt
Gear mini-PC, which is based on its Udoo Bolt SBC, provides a metal case, a power adapter, US and EU cables, a VESA mount, and a WiFi/BT kit. There are also plenty of vents to help the SBC?s standard fan cool AMD?s Ryzen Embedded V1000 SoC.

[...]

The Bolt and the Bolt Gear are further equipped with an Arduino Leonardo compatible Microchip Atmega32U4 MCU. The MCU can be used for robotics and other real-time applications. It can also be configured to run while the system is turned off and then turn on the computer based on trigger input.

- **Ultra-narrow DipDuino Arduino Compatible Board is a Perfect Breadboard Companion** [4]

  We previously wrote about a uChip DIP-sized Arduino Zero compatible board with 0.3? spacing between the two rows of pins making it perfect for breadboards as it left four rows on each side of the breadboard.

  There?s now another similar option with the appropriately named DipDuino board equipped with a Microchip Atmega328P MCU compatible with Arduino Pro or Pro Mini boards.

- **Using Photoresistor From Raspberry PI To Detect Light** [5]

  Photoresistor (also known as photocell) is a Light Dependent Resistor (LDR). As the name suggests, this components act just like a resistor, changing its resistance in response to how much light is falling on it. Usually, photoresistors have a very high resistance in near darkness and a very low resistance in bright light.

  This component is used to manage electronic or electric devices to answer light conditions enabling or disabling functions.

  Photoresistors are analogic components. So it can be used with microcontrollers having analogic inputs (like Arduino) to read light level.

  Unfortunately, Raspberry PI has only digital inputs (with threshold between High and Low being around 1V). This means that, without specific analogic-to-digital hardware, we?ll be able only to read if light is high or low.