NXP Speeds IoT and Edge Development with 64-bit Processing in a Palm-Sized System

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Small form-factor FRWY-LS1012A with mikroBUS™ Click Module and Ubuntu Userland expands development for hundreds of applications

NXP Semiconductors™ N.V. (NASDAQ: NXPI), a worldwide leader in advanced secure connectivity solutions, today announced the Freeway board for the Layerscape® LS1012A Communication SoC. The FRWY-LS1012A provides a low-cost development platform packed with connectivity options for quick product prototyping. The built-in mikroBUS Click module on the Freeway board provides easy expansion through hundreds of powerful click modules supporting sensors, actuators, memories and displays.

LS1012A delivers higher packet throughput with its onboard packet forwarding engine and enhanced security via NPX's trust architecture, which provides hardware root of trust through on-chip fuses, secure storage, secure boot and leverages trusted execution from Arm TrustZone technology.

With low power, rich software, and hundreds of expansion options, NXP scales 64-bit processing and software technologies down into low cost embedded systems. Designed to accelerate IoT and edge computing development, the FRWY-LS1012A also speeds development for broad market applications requiring gigabit ethernet, wireless, Bluetooth or NFC connectivity.

Measuring just 93mm X 80mm, this palm-sized system provides standard connectivity through USB, ethernet, micro SD card storage, and an M2 connector supporting PCI Express. The FRWY-LS1012A supports a pre-installed Layerscape SDK and provides an entry-level evaluation platform for the Layerscape family of 64-bit communication processors. The Layerscape SDK supports multiple build systems, including Yocto, OpenWRT and Ubuntu. With its on-board SD card reader, FRWY-LS1012A makes the Ubuntu Userland available for easy addition of new applications without recompilation, enabling an outstanding out-of-box experience.

Key features of the FRWY LS1012A development platform include:

- A MicroSD card slot offers flexibility with small, compact and portable storage options
- An M2 Connector enables Wi-Fi, Bluetooth and NFC applications.
- mikroBUS™ Click Module expansion connectors with I2C, SPI, UART and GPIO connectivity opens hundreds of add-on opportunities for developers in all types of applications.
- Built-in support for the Layerscape SDK (Ubuntu Userland) helps speed application development.
- Dual 1000Base-T Ethernet interfaces with RJ-45 connectors for ethernet connectivity
- USB2.0/3.0 OTG Micro A/B connector for debug
- SGTL5000 Audio ADC / DAC with 3.5mm microphone and headphone jacks for audio and microphone interface

Pricing and Availability
The FRWY-LS1012A board will be demonstrated in the NXP booth during Embedded World and available for order in April 2018 at a suggested retail price of $79.50. Please visit www.nxp.com/LS-FRWY for more information.