# Amazon Web Services and NXP
## Unleash Limitless IoT Opportunity with Node-to-Cloud Connectivity

The cost and complexity to develop, deploy and manage secure connected nodes has continued to gate the market from realizing the true potential of the IoT. Reducing these complexities, AWS and NXP ensure developers are able to create secure, cost-effective IoT solutions, increasing the accessibility of node-to-cloud connection for engineers.

Amazon FreeRTOS – an open-source MCU operating system built on the FreeRTOS kernel, offers developers a universal connection to the Amazon Web Services (AWS) platform.

NXP's IoT module, based on LPC54018, offers unlimited memory extensibility, a root of trust built on the embedded SRAM physical unclonable functions (PUF) and on-chip cryptographic accelerators. Together, LPC and Amazon FreeRTOS, with easy-to-use software libraries, bring multiple layers of network transport security, simplify cloud on-boarding and over-the-air device management, ushering in a new wave of connected devices.
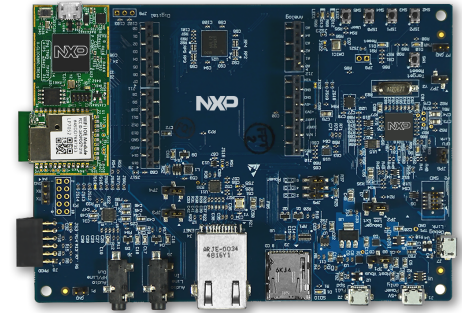
# LPC54018 IoT SOLUTION WITH AMAZON FreeRTOS

powered by aws

## MODULE FEATURE SUMMARY

- Amazon FreeRTOS enabled, ready for use in designs powered by AWS

- Flashless LPC54018 power-efficient MCUs with advanced peripherals based on the Arm® Cortex®-M4 core, running at 180 MHz

- High-speed USB device port

- Longsys GT1216 Wi-Fi module based on Qualcomm QCA4004

- Macronix 128Mb flash (MX25L12835FM2)

- Dual hirose expansion connectors provide access to wide range of peripherals and memory expansion

- CE (RED) and FCC Certified

- External debug probe connector works with popular NXP, SEGGER, P&E Micro, iSYSTEM probes

- Reset switch

**Pictured: LPC54018 MCU-based module and base board**

**nxp.com/LPC-AWS-Module**