


**Amazon FreeRTOS Curiosity PIC32MZ EF Bundle**  
(Part # DM320104-BNDL) 

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Amazon FreeRTOS Curiosity PIC32MZ EF Bundle is used to develop Amazon FreeRTOS-based applications. The bundle consists of Curiosity PIC32MZ EF development board, WiFi 7 Click Board & USB UART Click Board that can be used to develop an AWS cloud-connected applications. The bundle also includes the LAN8720A PHY Daughter Board to create an Ethernet-connected demo.

Amazon FreeRTOS is a microcontroller operating system that makes small, low-powered edge devices easy to program, deploy, secure and maintain. Amazon FreeRTOS is based on FreeRTOS, a popular open source operating system for microcontrollers, and includes software libraries that make it easy to securely connect devices locally to AWS Greengrass, directly to the cloud, and update them remotely

The high-performance PIC32MZ EF MCUs host the Amazon FreeRTOS and run at up to 415 DMIPs with industry-leading connectivity options including 10/100 Ethernet MAC, Hi-Speed USB & Dual CAN, ample Flash memory of up to 2 MB, rich peripherals and a robust tool chain which empower embedded designers to rapidly build complex applications.

## Features

PIC32MZ2048EFM100 32-bit MCU:  
200MHz, 2MB Flash, 512KB SRAM,  
Integrated FPU & Crypto accelerator,  
Hi-Speed USB, Ethernet & CAN

ATWINC1500 IoT network controller:  
IEEE 802.11 b/g/n Single-band 2.4GHz  
Extreme low power  
Security protocols supported: WPA/WPA2 Personal, TLS, SSL  
Network services: DHCP, DNS, TCP/IP (IPv4), UDP, HTTP, HTTPS

LAN8720A PHY Daughter Board:  
High-Performance 10/100 Ethernet Transceiver  
Compliant with IEEE802.3/802.3u (Fast Ethernet)  
Compliant with ISO 802-3/IEEE 802.3 (10BASE-T)

## Package Contents

- Curiosity PIC32MZ EF Development Board (P/N: DM320104)
- USB UART click (P/N: MIKROE-1203)
- WiFi 7 click - ATWINC1510-MR210PB (P/N: MIKROE-2046)
- LAN8720A PHY Daughter Board (P/N: AC320004-3)