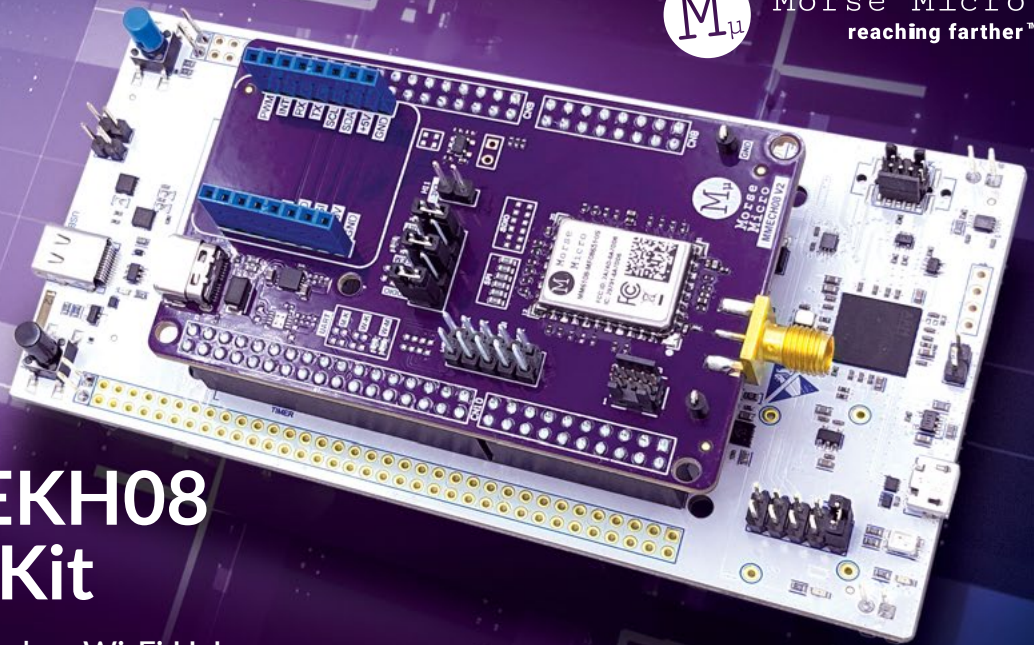




Morse Micro
reaching farther™



PRODUCT BRIEF

MM6108-EKH08 Evaluation Kit

Industry-Leading, Best-in-class Wi-Fi HaLow
Development Platform Supporting SMPS

Overview

The MM6108-EKH08-05US-02 evaluation kit is a fully integrated Wi-Fi HaLow® development platform that supports an STMicro development board. This powerful collaboration provides an affordable and flexible way for developers to test Wi-Fi HaLow while delivering superior RF performance and compliance.

The MM6108-EKH08-05US-02 development platform has been designed for Wi-Fi HaLow connectivity in compliance with the IEEE 802.11ah standard. It supports data rates up to 32.5 Mbps with programmable operation between 850 MHz and 950 MHz. The development platform offers several power consumption features including internal or external switched-mode power supply (SMPS) to reduce power consumption in run mode.

Evaluation Kit

Designed for developers seeking to validate Wi-Fi HaLow use cases for IoT environments, this kit includes the Morse Micro MM6108 SoC as well as the STMicro STM32 NUCLEO-U575ZI-Q board.

Total kit contents include:

- Wi-Fi HaLow shield (p/n: MMECH08) with MM6108 module (p/n: MM6108-MF08651-US)
- STM32 NUCLEO-U575ZI-Q board
- USB cable
- Antenna

Features



Several board connectors including ST morpho, SWD & ST Zip (inc. ARDUINO® Uno V3)



External or internal SMPS to generate Vcore logic supply



Supports data rates up to 32.5 Mbps



Supports a range of integrated development environments (IDEs) e.g. IAR Embedded Workbench® & MDK-ARM



Flexible power-supply options: ST-LINK USB VBUS, USB connector, or external sources



Programmable operation in the sub-1 GHz range (license exempt from RF bands worldwide)



On-board ST-LINK/ V2-1 debugger/ programmer with USB re-enumeration

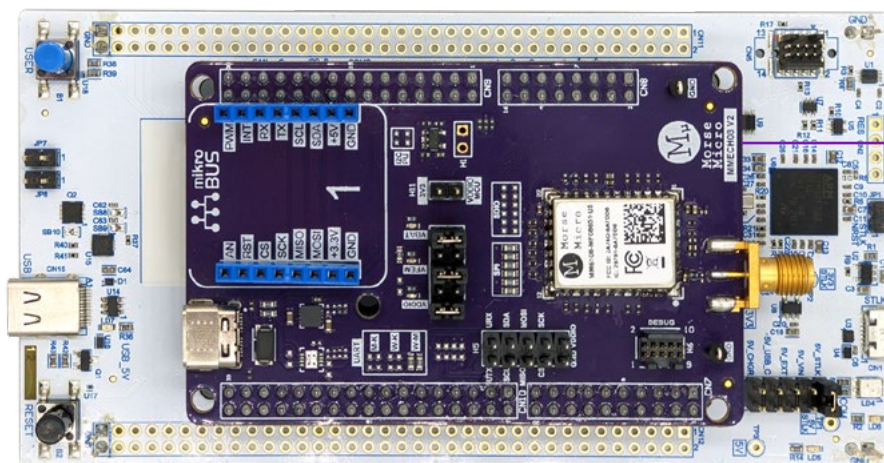


WPA3 security

Applications

- ✓ Cloud connectivity
- ✓ Machine performance monitors and sensors
- ✓ Connected vehicles
- ✓ Environmental monitoring
- ✓ Utility smart meter and intelligent grid
- ✓ Industrial automation controls
- ✓ Industrial, agricultural and commercial management
- ✓ Connected manufacturing
- ✓ Smart city networks
- ✓ Public safety monitoring
- ✓ Logistics and tracking
- ✓ Connected healthcare and wearables
- ✓ Smart home automation and connected appliances

Kit Contents



Morse Micro
MMECH08 Board

STMicro STM32
NUCLEO-U575ZI-Q
Board

Wi-Fi HaLow Modulation and Coding Scheme

MCS index	Modulation scheme	Coding rate	PHY rate (kbps) per BW			
			1 MHz	2 MHz	4 MHz	8 MHz
10	BPSK	1/2 x 2	167		N/A	
0	BPSK	1/2	333	722	1500	3250
1	QPSK	1/2	667	1444	3000	6500
2	QPSK	3/4	1000	2167	4500	9750
3	16-QAM	1/2	1333	2889	6000	13000
4	16-QAM	3/4	2000	4333	9000	19500
5	64-QAM	2/3	2667	5778	12000	26000
6	64-QAM	3/4	3000	6500	13500	29250
7	64-QAM	5/6	3333	7222	15000	32500

For more product information: www.morsemicro.com

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