

OVERVIEW

With the **M13-RA6M5-EK** evaluation board, users will be able to quickly develop and evaluate applications by using the on-board rich features such as its OctaFlash/RAM, 10/100-Mbit Ethernet and many more with the Renesas RA6M5 MCU device.

FEATURE

MCU

- R7FA6M5BH3CFB MCU (LQFP144 Package)
- ARM Cortex-M33 Core @ 200 MHz
- 2MB Code Flash, 512KB SRAM
- Secure Crypto Engine (SCE9)

MEMORY/STORAGE

- 32 MByte OctaFlash
- 8 MByte OctaRAM
- 32 MByte External QSPI Flash
- 16Kb Eeprom
- MicroSD interface

COMMUNICATION

- Ethernet (RMII and PHY)
- USB 2.0 Full-Speed (Host/Device)
- CAN-FD

DEBUG

- On board debugger JLink-OB™ (SWD/JTAG)
- Virtual COM

OTHER FEATURES

- Audio Codec with 4 pole 3.5mm headphone connector
- 3-axis Accelerometer
- 4 x user LEDs
- 2 x user switch
- 1 x Reset switch

EXPANSION

- 2 x Digilent PMOD™ Interface
- 1 x Mikrobus™ Interface

KIT CONTENT

- M13-RA6M5-EK board

DEMO SOFTWARE

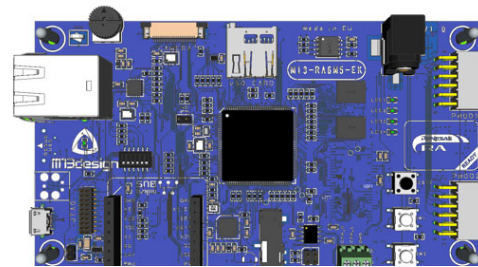
- **HTTPS server with automatic certificate generation using ACME & Let's Encrypt:**

Let's Encrypt is a non-profit certification authority used to secure billion of public websites free of charges. This RA6M5 demo project leverages the ACME protocol to automatically order a certificate from **Let's Encrypt** and get a green padlock in the address bar!

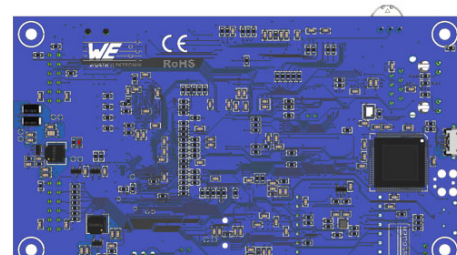
- **Wi-Fi / Ethernet gateway:**

A Mikrobus™ Wi-Fi module is used to implement a gateway with multiple network interfaces. The project demonstrates the simultaneous use of Ethernet and Wi-Fi.

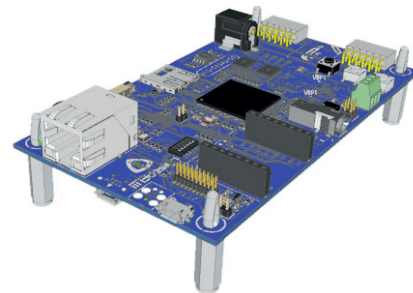
- **Web Radio demo**



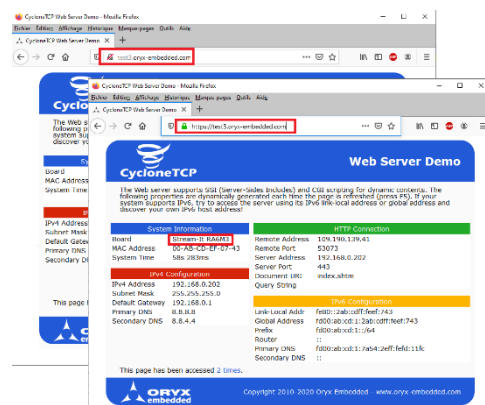
Top Side



Bottom Side



Isometric view



HTTPS server powered by ORYX CycloneTCP / CycloneSSL / CycloneACME

Find out more here: <https://www.m13design.fr/products/M13-RA6M5-EK.html>