

Low Power Long Range LoRa Module (863-928 MHz)

Manufacturers	Microchip Technology, Inc
Package/Case	SMD
Product Type	
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for WLR089U0-I/RM or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The WLR089U0 module is an ultra-low power, regulatory certified LoRa module based on the ATSAMR34J18 LoRa IC. This standalone module includes a 32-bit ARM® Cortex®-M0+ processor and offers 256KB of Flash and 40KB of SRAM (8KB battery backed) in a compact 17 x 13.5 mm package. With ultra-low power sleep currents as low as 790nA, the WLR089U0 modules are ideal for battery powered remote sensor applications.

The highly configurable module peripherals include up to 4 SERCOMs (configurable as I2C/SPI /UART/LIN interfaces) with one in the low power domain, 7 12-bit ADC channels and 2 analog comparators. The module supports LoRa, FSK, MSK and OOK modulations and delivers up to 18.6 dBm TX power with an RX sensitivity down to -136 dBm.

The module operates from 863 to 928 MHz and is FCC, IC and RED certified. Supported by WLR089 Xplained Pro Evaluation Kit (EV23M25A), Atmel Studio and a detailed module reference design package, these modules highly simplify the development and accelerate the time to market for LoRa end-nodes.

Reference Links:

Microchip's complimentary and confidential Wireless Check online design review service is available for customers who have selected our products for their application design-in*.

*The online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Features

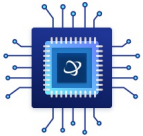
To get started with software development, download and install Atmel Studio 7

For software examples, update to ASF 3.44 and above in Atmel Studio

To access Chip-down design package, refer to the documents section on this page

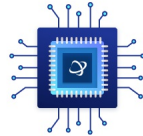
Enable Long Range STAR on SAM R34 ICs and WLR089U0 Module

Related Products



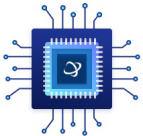
[VSC9990-SWLWEB](#)

Microchip Technology, Inc
N/A



[VSC9990-SWLI](#)

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[VSC9990-SWLSMB](#)

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N/A



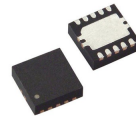
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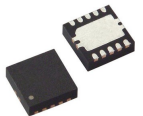
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