LoRa SiP Transceiver USB 256K Flash 32K SRAM

Manufacturers	Microchip Technology, Inc
Package/Case	TFBGA
Product Type	RF Integrated Circuits
RoHS	
Lifecycle	
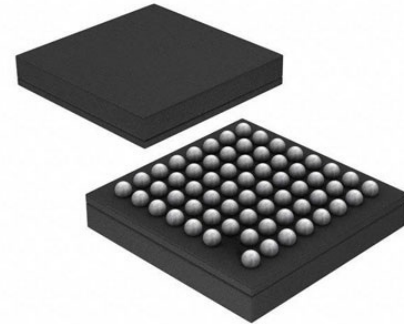
Images are for reference only

Please submit RFQ for ATSAMR34J18B-I/7JX or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The ATSAMR34J18 is an ultra-low power microcontroller combined with a UHF transceiver communication interface. It uses the 32-bit ARM® Cortex®-M0+ processor and offers 256KB of Flash and 40KB of SRAM (8KB battery backed) in a compact 6 x 6 mm BGA package. With ultra-low power sleep currents as low as 790nA, the ATSAMR34J18 devices are ideal for battery powered remote sensor applications.

The highly configurable peripherals include up to 5 SERCOMs (configurable as I2C/SPI /UART/LIN interfaces) with one in the low power domain, 8 12-bit ADC channels, 2 analog comparators and custom configurable logic modules. The transceiver supports LoRa, FSK, MSK and GSK modulation and delivers up to 20 dBm TX power with an RX sensitivity down to -148 dBm.

Supported by certified SAM R34 Xplained Pro Evaluation Kit, Atmel Studio and a detailed chip-down design package, these devices highly simplify the development and accelerate the time to market for LoRa end-nodes.

SAM R34/35 SiP devices come in six device variants with different memory/interface options. For more information on specific SAM R34/35 device variants, refer to the product variant below.

ATSAMR34J18, ATSAMR34J17, ATSAMR34J16, ATSAMR35J18, ATSAMR35J17, ATSAMR35J16

Reference linksTo get started with software development, download and install Atmel Studio 7For software examples, update to ASF 3.44 and above in Atmel StudioTo access Chip-down design package, refer to the documents section on this page

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

Industry's lowest power LoRa® SiP device

32-bit Arm® Cortex M0+ MCU and LoRa Transceiver

Small form factor: 6x6 mm compact BGA package

256KB Flash and 40 KB RAM accomodates application code and stack

Most cost and size effective solution, eliminating need for external MCU

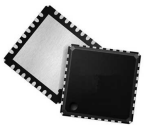Fully supported 862 to 1020 MHz frequency coverage

Down to -148 dBm Receive Sensitivity

Up to 20 dBm maximum transmit power
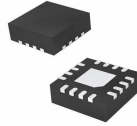
Low RX current of 17mA (typical)

LoRa Technology, (G)FSK, (G)MSK and OOK Modulation

Related Products
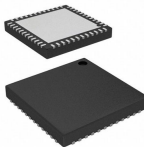
MRF89XAT-I/MQ

Microchip Technology, Inc

QFN-32

ATA8510-GHQW

Microchip Technology, Inc

32-VFQFN
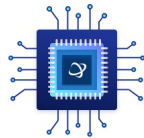
ATZB-S1-256-3-0-CR

Microchip Technology, Inc

SMD
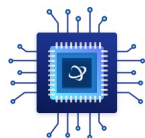
ATSAMR21G18A-MUT

Microchip Technology, Inc

VQFN-48

MRF24J40MAT-I/RM

Microchip Technology, Inc

SMD-12

AT88RF04C-MX1G

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32-VFQF

ATA8402C-6AQY-66

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