

# ZM3102AU-CME1R Datasheet

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DiGi Electronics Part Number	ZM3102AU-CME1R-DG
Manufacturer	<a href="#">Silicon Labs</a>
Manufacturer Product Number	ZM3102AU-CME1R
Description	RF TXRX MODULE ISM < 1GHZ SMD
Detailed Description	General ISM < 1GHz Z-Wave® Transceiver Module 908MHz Antenna Not Included Surface Mount

This model ZM3102AU-CME1R is available at DiGi.Electronics.

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## Purchase and inquiry

Manufacturer Product Number:

ZM3102AU-CME1R

Series:

Z-Wave®

DiGi-Electronics Programmable:

Not Verified

Protocol:

Z-Wave®

Frequency:

908MHz

Power - Output:

-2dBm

Serial Interfaces:

SPI, UART

Utilized IC / Part:

-

Voltage - Supply:

2.1V ~ 3.6V

Current - Transmitting:

24mA ~ 36mA

Operating Temperature:

-15°C ~ 85°C

Manufacturer:

Silicon Labs

Product Status:

Obsolete

RF Family/Standard:

General ISM < 1GHz

Modulation:

FSK

Data Rate:

40kbps

Sensitivity:

-102dBm

Antenna Type:

Antenna Not Included

Memory Size:

32kB Flash, 2kB SRAM

Current - Receiving:

23mA

Mounting Type:

Surface Mount

Package / Case:

Module

## Environmental & Export classification

Moisture Sensitivity Level (MSL):

3 (168 Hours)

HTSUS:

8517.79.0000

ECCN:

EAR99

## ZM3102

### Z-Wave® Integrated Wireless Module for Home Control



The ZM3102 represents the third-generation of Z-Wave® wireless technology, and is ideal for easily adding Z-Wave® control and status capabilities to home control, home security monitoring, and home energy management products. The ZM3102 module includes a Z-Wave® chip and external components required to implement a complete, drop-in solution.

The wireless mesh network technology automatically routes the RF signal from one Z-Wave® node to the next, around obstacles and radio dead spots, resulting in high reliability and assured whole-home coverage.

The ability to also use the Z-Wave® protocol over IP (Internet Protocol) networks allows Z-Wave® enabled products to connect seamlessly using the wireless mesh network, the home network, and the Internet.

Z-Wave® allows both manufacturers and consumers the security of knowing that Z-Wave® certified products, regardless of brand, will work together.

#### Target Markets

- Home control
- Home security and monitoring
- Home energy management

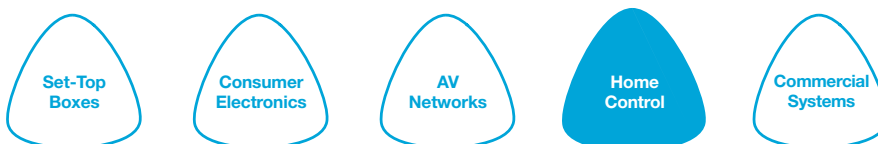
#### Benefits

- Integration of home, entertainment, security, and energy management control with metadata support
- Seamless interoperability between multiple vendors and applications
- Robust and reliable whole-home coverage through mesh networking
- Z-Wave® protocol over IP (Internet Protocol) networks, such as home network and Internet
- Supports unicast, multicast, and broadcast messages
- Low power consumption for multi-year battery life

#### Features

- Integrated CPU and RF transceiver
- 32KB flash, 2KB SRAM
- Triac controller
- 4-ch 12-bit rail-to-rail ADC
- Integrated GPIO, SPI, UART, PWM
- Ultra-low power sleep mode
- 40 kbps data rates, low latency
- Uses the unlicensed Short-Range Device (SRD) frequency bands
- Battery monitor and built-in supply regulators
- Power supply: 2.1-3.6V
- 12.5x13.6mm module, 18 pins

#### Powering the new digital home

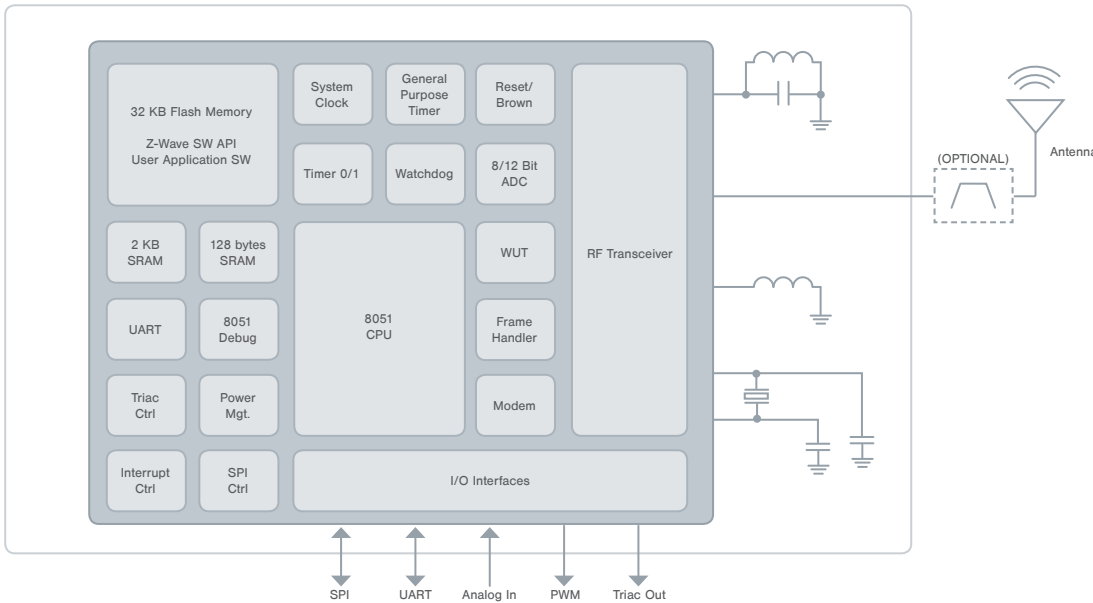


# ZM3102

## Z-Wave® Integrated Wireless Module for Home Control



### ZM3102



#### Z-WAVE® HOME CONTROL MODULE SELECTION GUIDE

	ZM3102	ZM4101	ZM4102
Frequency	868.40...921.42 MHz	779...956 MHz	779...956 MHz
Program Memory	32 KB flash	64 KB OTP	64 KB OTP
SRAM	2 KB	16 KB	16 KB
NVRAM		64 B	64 B
GPIO	10	32	10
Keyboard Scan		128 keys	
UARTs	1	2	1
SPI Ports	1	2	1
USB		•	
AES Security		•	•
IR Transmitter		•	
IR Learning		•	
Data Rate	40 kbps	100 kbps	100 kbps

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