# 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

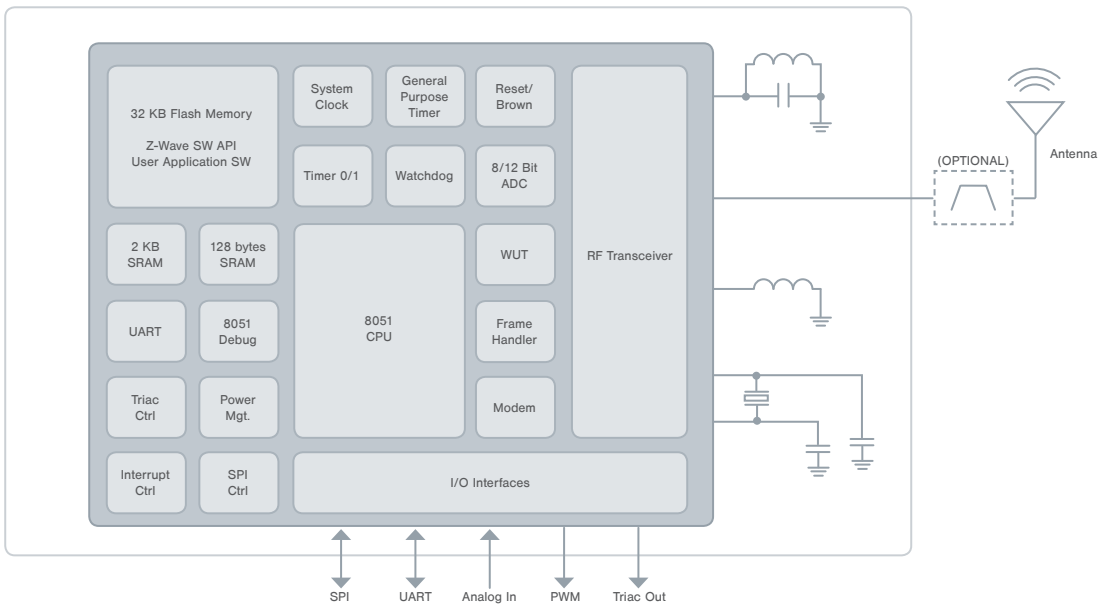
- Integrated CPU and RF transceiver
- 32KB flash, 2KB SRAM
- Triac controller
- 4-ch 12-bit rail-to-rail ADC
- Integrated GPIO, SPI, UART, PWM
- Ultra-low power sleep mode
- 40 kbps data rates, low latency
- Uses the unlicensed Short-Range Device (SRD) frequency bands
- Battery monitor and built-in supply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

### Powering the new digital home

Set-Top Boxes | Consumer Electronics | AV Networks | **Home Control** | Commercial Systems

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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 |

## International Sales Distributors

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