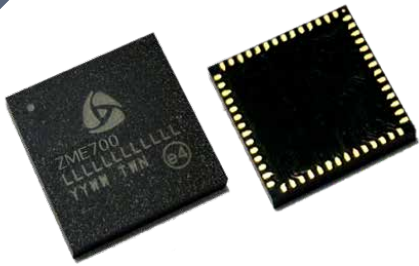


Z-Wave 700

Fully Integrated Z-Wave Wireless System-in-Package



The ZME700A System-in-Package module is a fully integrated Z-Wave module. With its long range and low power consumption, it is an ideal solution for smart home control and sensing applications such as motion sensors, door/window sensors, door locks, lighting control, thermostats, security networks, gateways and much more in the “Internet of Things”.

Combined with the Z-Wave Application Framework the ZME700A is the core building block for all smart home devices compliant with the Z-Wave interoperable ecosystem. The module contains a native security stack and a comprehensive set of hardware peripherals usable for advanced device functionality and offers 48-64kB of flash memory for applications.

A baseband controller, Sub-GHz radio transceiver, crystal, decoupling, and matching is included to provide a complete Z-Wave System-in-Package module requiring only an external SAW filter and antenna.

The ZME700A SiP is based on an ARM® Cortex-M CPU, which is optimized to handle the data and link management requirements of a Z-Wave node. The Z-Wave protocol supports automatic retransmissions, collision avoidance mechanisms, frame acknowledgements, frame CRCs, frequency agility, and full mesh routing to ensure a highly reliable and robust wireless communication solution.

Visit z-wave.sigmadesigns.com/700-platform to learn more.

SYSTEM FEATURES

- [Z-Wave end device command classes](#)
- [Native S2 security support](#)
- [SmartStart automatic inclusion](#)

SIP

- Sub-GHz radio transceiver module
- Temperature range min. -40 to +85 deg C
- ARM® Cortex-M CPU
- 48-64kB flash application memory
- 8kB user application SRAM
- 2 UART, 2 SPI, I²C
- 4-channel 12-bit ADC
- 4-channel 16-bit PWM
- Min. 15 GPIOs
- Power-On-Reset/Brown-out detection
- Supply voltage range from 1.8V to 3.6V for optimal battery operation
- Sleep mode current typ. <1µA

RADIO TRANSCEIVER

- ITU G.9959 compliant
- Z Wave 9.6/40/100kbps data rates
- Supports all Z-Wave Sub-GHz frequency bands (865.2 MHz to 926.3 MHz)
- Supports multi-channel frequency agility and listen before talk
- Worldwide component – ability to switch between SAW filters

KEY FEATURES

- +10-year coin cell battery life for sensor applications such as door/window sensors
- 100 m / 300 ft. direct range free field
- Low latency wake-up <1ms
- Security S2 key exchange <1s

