Kinetis® KW21Z–2.4 GHz 802.15.4 Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core

KW21Z

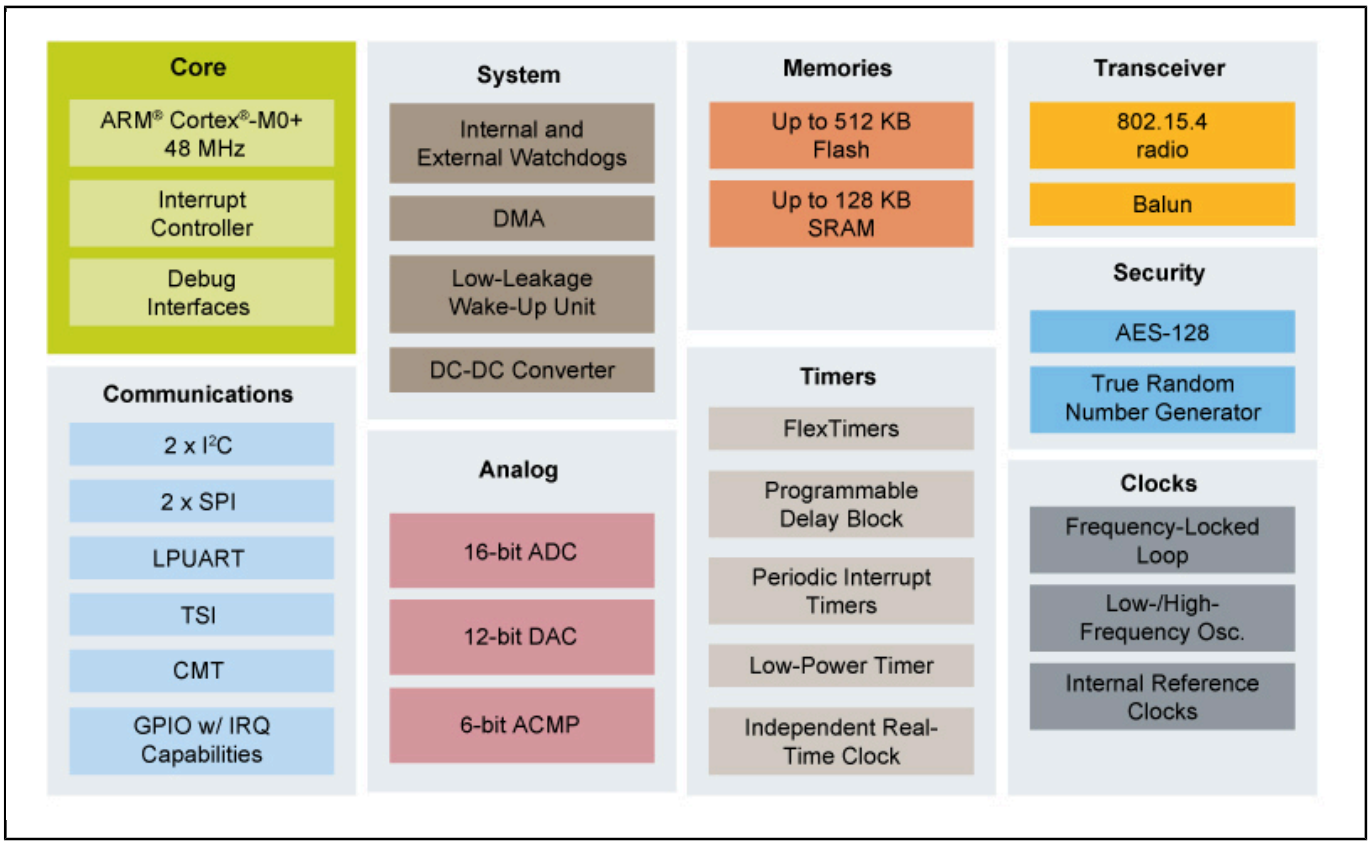
Last Updated: Dec 16, 2024

Note: JN5189/88T is preferred for any new Zigbee®, Thread design. No new software releases planned

The KW21Z is an ultra-low-power, highly-integrated single-chip device that enables IEEE® 802.15.4 RF connectivity for portable, extremely low-power embedded systems. Applications include portable healthcare devices, access control, security systems, smart energy and home area networks.

The KW21Z Wireless MCU integrates a 2.4 GHz transceiver supporting O-QPSK modulations, an Arm® Cortex®-M0+ CPU, up to 512 KB Flash and up to 128 KB SRAM, 802.15.4 packet processor, hardware security and peripherals optimized to meet the requirements of the target applications. The KW21Z is an ideal solution for single-chip Thread and Zigbee devices including routers and end devices as well as border routers and Coordinators when adding connectivity for communicating with the cloud.

Kinetis® W Series KW21Z MCUs Block Diagram Block Diagram



View additional information for Kinetis® KW21Z-2.4 GHz 802.15.4 Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core.

Note: The information on this document is subject to change without notice.