



Kinetis® KW20Z–2.4 GHz 802.15.4 Wireless Radio Microcontroller based on Arm® Cortex®–M0+

KW20Z

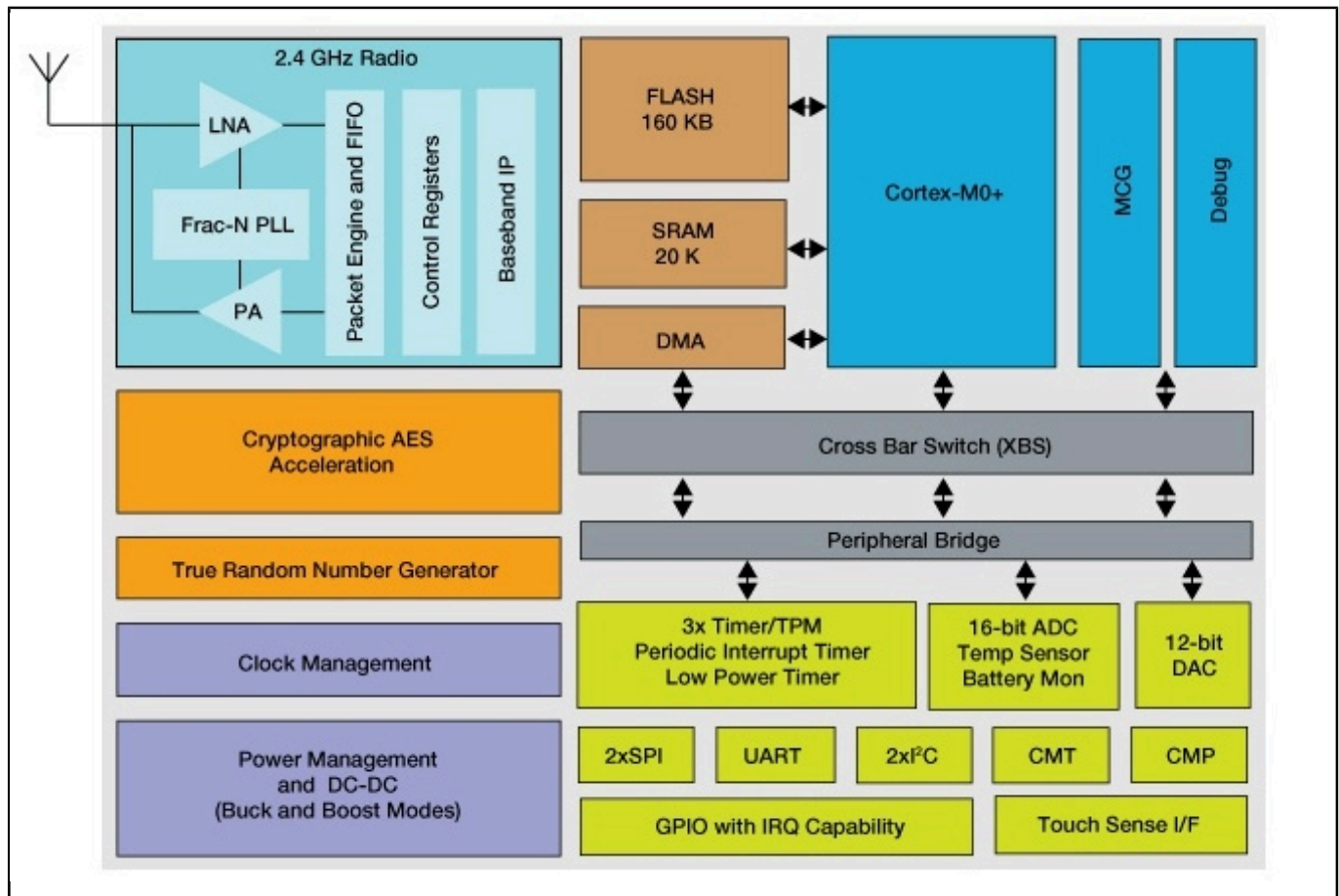
Last Updated: Dec 23, 2025

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

The KW20Z is an ultra low-power, highly-integrated single-chip device that enables IEEE® 802.15.4-2011 RF connectivity for portable, extremely low-power embedded systems. Applications include portable health care devices, access control, security systems, smart energy and home area networks.

The KW20Z Wireless MCU integrates a 2.4 GHz transceiver supporting O-QPSK modulations, an Arm® Cortex®-M0+ CPU, 160 KB Flash and 20 KB SRAM, 802.15.4 packet processor, hardware security and peripherals optimized to meet the requirements of the target applications.

Kinetis W Series KW20Z MCUs Block Diagram Block Diagram



View additional information for [Kinetis® KW20Z-2.4 GHz 802.15.4 Wireless Radio Microcontroller based on Arm® Cortex®-M0+](#).

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

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2026 NXP B.V.