

QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution

QN9080

Last Updated: Apr 11, 2024

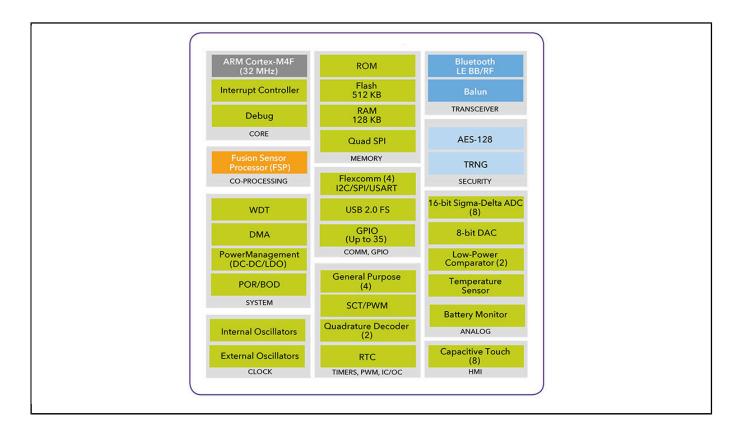
Note: QN9090/30 is preferred for any new Bluetooth LE design.

QN908x is an ultra-low-power, high-performance and highly integrated Bluetooth Low Energy solution for Bluetooth[®] Smart applications such as sports and fitness, human interface devices, and app-enabled smart accessories. It is specially designed for wearable electronics with a small capacity battery.

QN908x integrates a Bluetooth Low-Energy radio, controller, protocol stack and profile software on a single chip, providing a flexible and easy to use Bluetooth Low Energy SoC solution. It also includes a high-performance MCU (32-bit Arm® Cortex®-M4F), on-chip memory, and peripherals for users to develop a truly single-chip wireless solution.

Additional system features include fully integrated DC-DC and LDO, low power sleep timer, battery monitor, 16-bit high-resolution general purpose ADC, and GPIOs, to further reduce overall system size and cost. QN908x operates with a power supply range of 1.8 V to 3.6 V and has very low power consumption in all modes. It enables long lifetime in battery-operated systems while maintaining excellent RF performance.

QN908x Block Diagram Block Diagram



View additional information for QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution.

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. © 2024 NXP B.V.