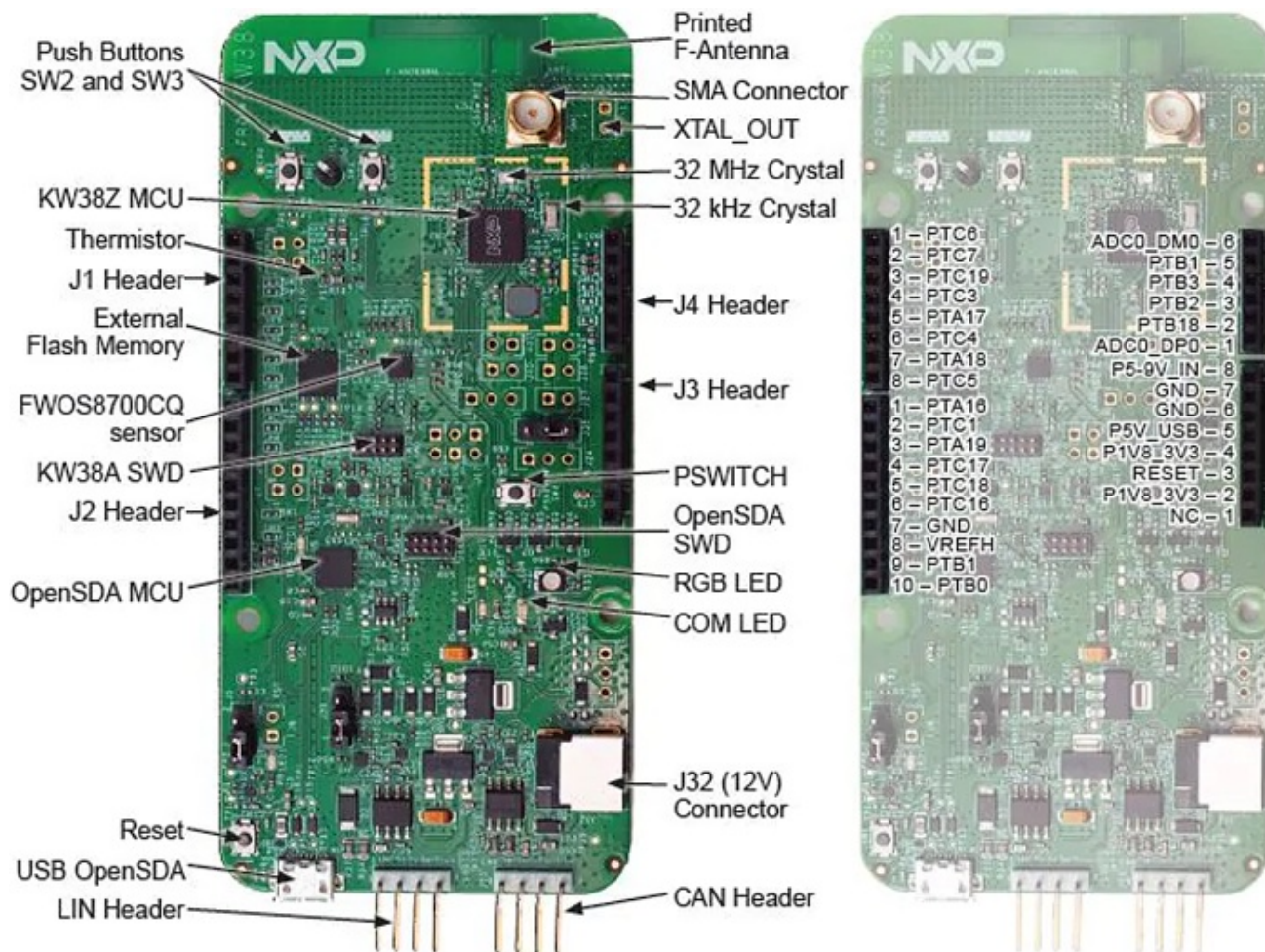


FOR GATEWAYS

MCU implements CAN FD and 2,4-GHz Bluetooth

NXP has released the KW38 micro-controller, which provides a data stream buffer for gateway designs.



Freedom development board for the KW38 micro-controller (Source: NXP)

The wireless MCUs integrate the long-range capability with Bluetooth low energy version 5.0 and generic FSK radio. Achieving a -105-dBm sensitivity with LE-coded 125 kbit/s data rate allows for connections in harsh environments and at extended distances. The data stream buffer allows the capture of radio parameters without stalling processor or DMA operations. This capability enables measurements needed for distance and angle approximations. The radio supports up to eight simultaneous secure connections in master/slave combination allowing multiple authorized users to communicate with the component.

The MCU integrates on-chip a FlexCAN module. It supports CAN FD as specified in ISO 11898:2015. The module has 32 Message Buffers, which are configurable for transmission or reception. The clock source is programmable: either peripheral clock or oscillator clock. The priority of mailboxes and the receive Fifo is selectable.

The KW38 freedom development board comes with a 2,4-GHz Bluetooth interface and generic FSK wireless connectivity. Additionally, it features CAN FD and LIN connectivity. The product can also be used as a shield for a host processor board. It comes with 4-Mbit external serial flash, multiple power supply options, push/capacitive touch buttons, switches, LEDs, and integrated sensors.

[hz](#)