

Functional Description

The Buster radio frequency (RF) receiver is a compact single in-line package (SIP) designed for remote keyless entry (RKE) and tire pressure monitor system (TPMS) applications. An Infineon TDA5211 superheterodyne integrated circuit (IC) demodulates frequency shift keyed (FSK) data or 100% amplitude shift keyed (ASK a.k.a. on-off keyed (OOK)) data. Buster does not contain a microcontroller. Inputs to Buster are power, ground, enable, ASK/FSK* mode select, and the RF signal. When Buster is disabled, an internal polling circuit duty cycles the operating current down by at least half. The output from Buster is an open collector digital data signal that remains in the passive state when no detectable RF signal is present. When RF signal is present, the digital data signal becomes active. An external interrupt circuit to filter the digital data pulses is recommended to wake up the external host microcontroller. Upon wakeup, the microcontroller activates Buster enable and selects ASK or FSK mode to receive subsequent digitized demodulated data packets. The host microcontroller is responsible for decoding the data into commands.