



TXB-ZBM Module Operational Description

Purpose of the TXB-ZBM Module

The intended use of the TXB-ZBM Module is to provide bi-directional 2.4GHz communication between products containing the TXB-ZBM or like 2.4GHz transceiver.

TXB-ZBM Transceiver

The TXB-ZBM transceiver IC is an integrated microprocessor and Zigbee transceiver. The microprocessor runs off of a 24MHz crystal. When a user presses a command on a bi-directional enabled remote control, for example, containing the TXB-ZBM to start the play control on a DVD Player, the TXB-ZBM module will take in RS232 data from the remote control and using Offset Quadrature Phase Shift Keying (OQPSK) modulation, it transmits a 2.4GHz command. When receiving data, it receives the 2.4GHz signal from the source, and converts the signal to serial data that is then transmitted to the destination control product, in this case, the remote control.

TXB-ZBM Antenna

The TXB-ZBM Transceiver Module utilizes the Antenova A5645 SMD Antenna. It is a 20.5mm x 3.6mm x 3.3mm surface mount antenna with a peak gain of 1.8dBi designed for 2.4GHz applications. This antenna is not externally accessible when the module is installed in an end product.