VMX-100

Operational Description: The VMX-100 is a Bluetooth compatible 2.4GHz radio. It can be integrated into many different devices using the three antenna types. The Bluetooth radio uses the CSR BC02 chip. A 16MHz crystal is used as the timing source for the generation of all transmission frequencies. The CSR BC02 radio chip is in full compliance with the frequency hopping requirements detailed in the Bluetooth 1.1 specification. The CSR BC02 uses all 79 channels equally on average. The CSR BC02 receiver hops in synchronization with the associated transmitter. The CSR BC02 generates a pseudorandom sequence that is used to control the hopping sequences. The chip evenly distributes a continuous stream of data over the 79 channels. This even distribution is realized even with a short burst of data.

Clock Frequencies: 16MHz

Description of protection covering control, tuning and filtering circuitry of receivers: The VMX-100 has an EMI shield can that covers all of the circuitry except for the 3.0 V regulator and the front-end pi filter and antennas. The receiver circuitry for the VMX-100 has some discrete filtering and a low noise amplifier. All other functions are performed internally to the CSR radio.