



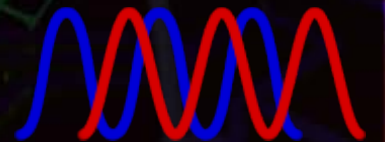
The Ultimate T-Embed CC1101

Learn **Wi-Fi**, **BLE**, **RFID**, **HID**, **Sub-GHz** and more with the T-Embed CC1101

What Is RF?

Radio Frequency (RF) refers to a range of electromagnetic wave frequencies—from 3 kHz to 300 GHz—that are used to transmit information wirelessly through the air.

Instead of using cables, RF waves carry signals through space, allowing devices to communicate over short or long distances depending on the frequency, power, and environment.



Real-World Examples of RF

Walkie-Talkies (FRS/GMRS): Used for short-range two-way voice communication.

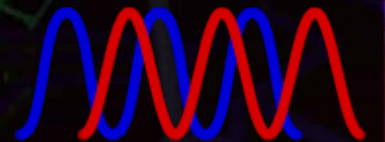
AM Radio Broadcasting: Transmits audio signals over long distances using low-frequency RF waves.

FM Radio: Provides higher-quality audio transmission using VHF RF signals.

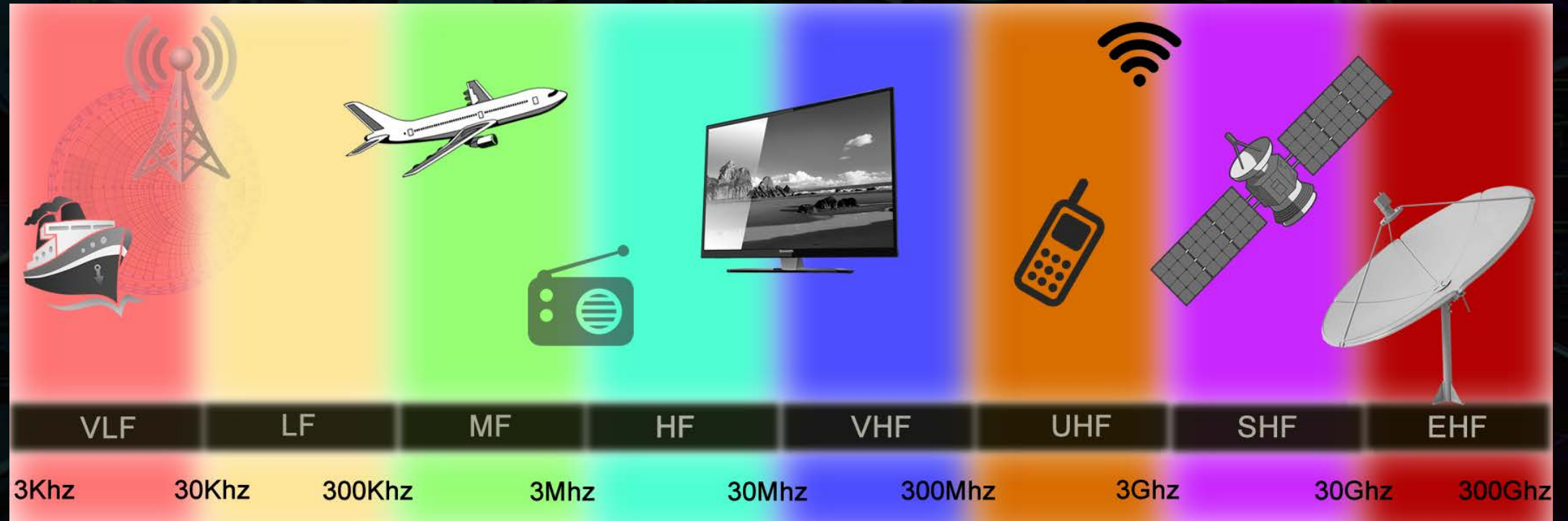
TV Broadcast Signals: Deliver over-the-air television channels to home antennas.

Remote Key Fobs: Transmit RF signals to lock, unlock, or start vehicles remotely.

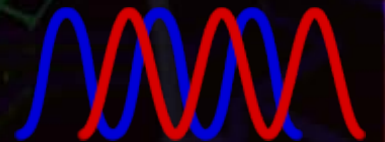
Satellite: Broadcasts television channels via satellites directly to homes.



RF Spectrum



Why it matters: different devices use different slices of this range to avoid stepping on each other



The CC1101 Transceiver

A low-power Sub-GHz radio chip for sending & receiving wireless data.

Frequency support: 300–348 MHz, 387–464 MHz, 779–928 MHz

