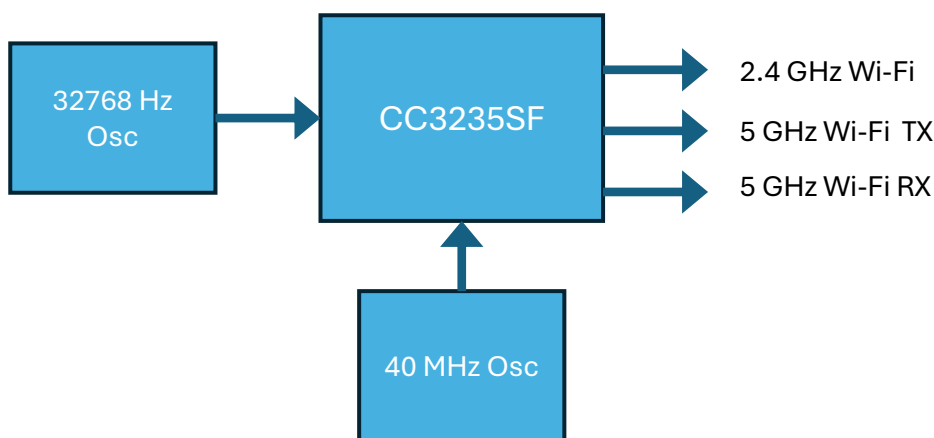# Irrigreen Controller 705101 Frequency Block Diagram

A Texas Instruments CC3235SF combines a microprocessor and radio in the Irrigreen Controller 705101. The specification sheet is listed separately. A 40 MHz oscillator provides source frequencies of operation using a clock divider for lower frequencies or a Digital PLL for higher clock frequencies needed for the 2.4 GHz and 5 GHz radios. A Wi-Fi software stack from Texas Instruments is used where the 2.4GHz radio ranges from 2.412 GHz to 2.462 GHz and the 5GHz radio ranges from 5.180 GHz to 5.825 GHz. A 32768 Hz oscillator operates a real time clock.

Irrigreen Controller 705101 Frequency Block Diagram

A Texas Instruments CC2652R7 combines a microprocessor and radio in the Irrigreen Controller 705101. The specification sheet is listed separately. A 48 MHz oscillator provides source frequencies of operation using a clock divider for lower frequencies or a Digital PLL for higher clock frequencies needed for the 2.4 GHz radio. A Bluetooth Low Energy software stack from Texas Instruments is used where the BLE 2.4 GHz ranges from 2.402 GHz to 2.480 GHz. A 32768 Hz oscillator operates a real time clock.

```
┌──────────┐        ┌──────────────┐
│ 32768 Hz │───────▶│              │────────▶  2.4 GHz
│   Osc    │        │   CC2652R7   │           Bluetooth
└──────────┘        │              │
                    └──────▲───────┘
                           │
                    ┌──────┴───────┐
                    │  48 MHz Osc  │
                    └──────────────┘
```