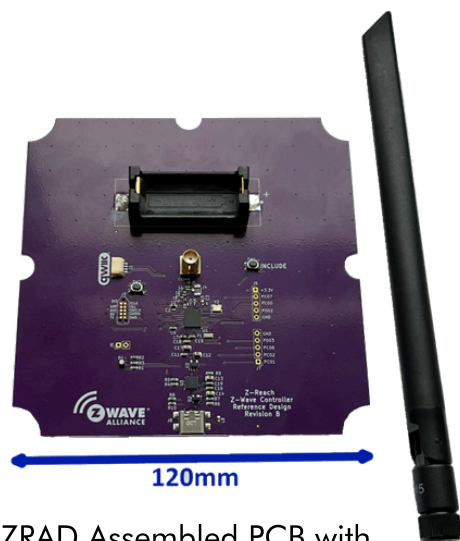


Z-Wave Reference Application Design (ZRAD), a best-in-class RF Range Z-Wave reference design, expedites Z-Wave product development, serving as an optimal platform for host controller interfaces or Z-Wave end device prototyping.

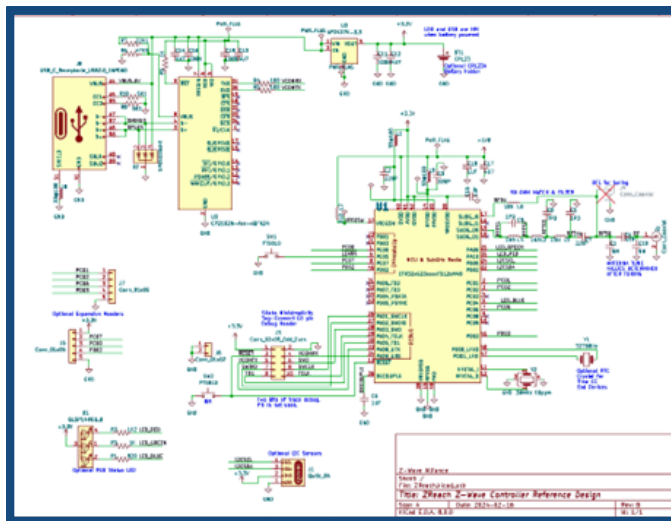
Available on GitHub under the MIT License, ZRAD offers flexibility for commercial use, with customization options to suit specific requirements.

ZRAD prioritizes exceptional RF range at a competitive cost.



ZRAD Assembled PCB with recommended antenna

\*Note: ZRAD is not a final product and requires FCC/CE testing, Z-Wave Certification, enclosure design, and packaging for commercial release. However, it facilitates Z-Wave end product prototyping, offering various populate options for QWIIC sensors, color LEDs, and GPIO connections. Additionally, a battery holder supports development of low-power sleeping or FLiRs devices.



## ZRAD FEATURES

- Public GitHub repository
  - Open-Source repository
  - MIT License
  - <https://github.com/drzwave/ZRAD>
- KiCAD schematic & PCB layout
  - Easy import into Altium
  - Gerbers for immediate production
  - 4-layer PCB – 5" square
- Z-Wave US Long Range 2+mi RF range
- Z-Wave EU 1+mi RF range
  - Open field 100% connectivity
- Silicon Labs EFR32ZG23 +20dBm
  - 32-bit ARM CM33 CPU 39Mhz
  - 512K Flash 64K RAM
  - SubGHz Radio +20dBm Tx
  - Robust peripherals
  - Tag-Connect debug connector
- Silicon Labs CP2102N USB to UART
- USB-C connector
- Standard Z-Wave SerialAPI firmware
- QWIIC I2C connector
- Color LED
- GPIO Expansion Header
- CR123A Battery Holder
- White Paper on Antenna Best Practices
- Theory of Operation documentation
- BOM cost under \$15 @10K