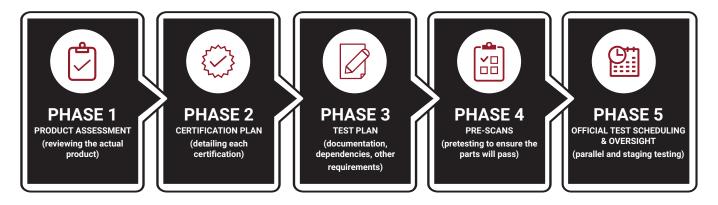


# What problem are we solving and why should you care?

Adding wireless/cellular components to your electronic product adds several layers of complexity including design verification testing, regulatory compliance and carrier certification issues. F3 Wireless can help you with detailed direction and experienced consultation on how to get through certification quickly and efficiently, ensuring faster time to volume and lower total development costs. We design for testability which ensures quick and low cost certification compliance.

## Types of certification:

- · Governmental (FCC, ISED, CE/RED)
- Industry (PTCRB, BlueTooth SIG, WiFi Alliance)
- Carrier (AT&T, Verizon, Sprint, T-Mobile, Rogers, Telus)
- Environmental (UV, temp, shock, vibration)



#### What will we do and what's the deliverable?

F3 will review your product requirements and documentation to create a detailed Certification Test Plan. This will include testing requirements, which pre-scans should be done to ensure the device can pass, in addition to the pass/fail criteria. It will include test factors like what the lab will expect, what your device needs to do, and any preparation of the sample devices. F3 ensures your device is ready for testing, will send prepared units to the test labs, and deal with any issues that come up. Once complete, you'll receive the test results including pre-scans and the official certification results.

## Pitfalls Avoided with CertShepard

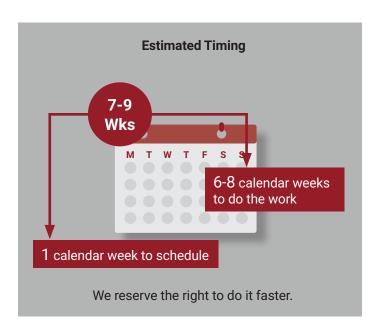
- A lot of money can be wasted using an "FCC approved" radio module if it turns out certifications are required as a result of your product's use-cases. We'll ensure you know what you're getting into so you can make the best choices.
- Product performance can suffer and costs can climb when radio performance is assumed and not rigorously tested.
- Product plans can be structured around certification misconceptions, causing product failure due to cost, time to market, features etc.
- Wasted time spent interacting with the test lab because the device and it's documentation aren't configured per lab requirements.
- Weeks can be wasted waiting to get devices tested only to find out it fails.



# **Customer Must Supply to F3:**

Mechanical, schematic, PCB design files and the Bill of Materials

- If the device has been built, 3 samples of the DUT, batteries, chargers, power supplies and comm interfaces
- List of countries of operation
- List of cellular carriers if applicable
- Device requirements document, use-cases and user stories



#### **How Much Will it Cost**

The effort described here is typically 2 weeks, 80 man-hours, of labor spread out over the time it takes to get your product through the test labs. Contact F3 for a quote based on our current standard labor rate.

### Why F3 Wireless for Certification Assistance?

- 1) Know-how: We execute these product developments ourselves so we know how and what to do when it comes to radio certification.
- 2) Facilities: We have all the equipment to do these tests and more importantly pre-tests, to ensure that when the real testing happens we can guarantee the device will pass.
- Experience: We've done this many times, and we've seen every way a device can fail, get held up, delayed, or sidelined. We have checklists of how to avoid the minefield of potential problems, and the steps that will lead you to success.

#### **Contact Info**



F3 Wireless 211 St. Anthony Parkway Ste 100 Minneapolis MN 55418-4595







