

10 Steps to PTCRB Certification for Integrated Devices

Deploying your cellular enabled devices using pre-certified wireless modules is easier than you think. Follow these ten simple steps to bring your device to market quickly and cost-effectively.

01 Select a PTCRB Certified Module
Device manufacturers must select the cellular radio technology that provides optimal application performance and value. A PTCRB certified wireless module offers the necessary features and functions, the required regulatory approvals, and operator recognized industry certifications. Save time and cost with pre-certified modules for cellular enabled applications.

A search of the PTCRB certification database provides a convenient list of certified cellular modules.

www.ptcrb.com/certified-devices

02 Review Module Selection with the MNO/MVNO
Determine if the module meets all operator prerequisites and certifications or if additional operator-specific evaluation, testing, or certification is required.

03 Integrate Module into the Host Device
Generally, modules do not connect to an operator network by themselves. They are integrated into a product having an antenna, power conditioning circuitry, a controlling micro, and a SIM card. Manufacturers should design the radio into the host following guidelines and instructions provided by the module Original Equipment Manufacturer (OEM), as well as SIM and antenna component suppliers.

04 Comply with Government Regulations
In North America, the device must comply with U.S. FCC and Canada ISED telecommunications rules. Consult with a qualified regulatory test lab to determine the compliance requirements for testing, labeling, and user instruction.

05 Request Certification Through PTCRB.com
Register on www.ptcrb.com and request certification for your cellular enabled device. Devices integrating certified modules follow the same process as smartphones with the exception that the manufacturer must indicate which module they are using when submitting their certification request.

The “PTCRB How to Certify an Integrated Device” guide provides step-by-step details on the PTCRB certification process.

06 Select a PTCRB Primary Laboratory
The PTCRB Primary Test Laboratory will determine which interfaces require re-evaluation due to the integration of a PTCRB-certified module. Their analysis will determine which specific test cases to execute for the device.

A list of PTCRB Primary Test Laboratories can be found on www.ptcrb.com.

07 Perform Testing

Perform testing as specified by PTCRB lab. In many cases, the device only requires testing on the interface with the integrated module. For example, testing may include evaluation of the audio interface, power interface, the SIM, RF radiated spurious emissions, and antenna performance.

Detailed information on testing and the evaluation process is in the “PTCRB NAPRD03” document available on www.ptcrb.com/certification-program.

08 Submit Required Documents to Database

The PTCRB lab will submit testing related information to the PTCRB certification database. The manufacturer will also provide user manuals and other relevant product information.

09 Fund Certification

The device manufacturer will pay the test lab for testing and CTIA for the PTCRB certification fee. Once funding is received, and all documents are submitted, the device is PTCRB certified.

10 Keep Certification Updated

Once a device is PTCRB certified, it is required to be manufactured as initially certified. Product changes and updates must be re-assessed to maintain certification status.



Benefits of PTCRB Certification for Integrated Devices

What is PTCRB?

PTCRB is a certification program established in 1997 by leading wireless operators to define test specifications and processes to ensure device interoperability on global wireless networks.

Devices that PTCRB Certifies

PTCRB certifies mobile devices including smartphones, laptops, and IoT product categories such as wearables, routers, payment systems, meter readers, automotive navigation systems, GPS telematics, and more.

Why is PTCRB Certification Beneficial?

PTCRB certification provides third-party assurance that certified devices meet a minimum set of requirements to ensure interoperability with wireless networks throughout the world.

Operators that Require PTCRB Certification

Several North American Mobile Network Operators (MNOs) and Mobile Virtual Network Operators (MVNOs) establish PTCRB certification as a prerequisite for placing a cellular device on their network.

How Can I Learn More About PTCRB Certification for My Integrated Device?

See: www.ptcrb.com/certification-program/



Get IoT Network Certified

Is your device an IoT device? Go to GetIoTNetworkCertified.com to learn how to easily get your cellular enabled IoT device to market quickly and cost-effectively.