

PTCRB **TESTING & CERTIFICATION** 7 STEPS TO REACH YOUR TARGET

Test House | Systems House | Software House

PTCRB CERTIFICATION IS A MUST FOR THE NORTH AMERICAN MARKET

PTCRB was established in 1997 as the certification forum by North American cellular operators. It provides a framework within which GERAN (GSM) UTRAN (UMTS) and E-UTRAN (LTE) mobile devices and modules obtain Type Certification for usage on PTCRB operator networks. PTCRB certification is applicable for devices operating in the 850, 1900 MHz bands for GSM, the FDD Bands II, IV, V for UMTS, and all PTCRB relevant eFDD bands for LTE.

CTIA is the assigned administrator for the PTCRB certification process and is also responsible for the administration of PTCRB issued IMEI's.

The PTCRB certification requirements are constantly updated to keep track with the latest technological developments.

PTCRB certification ensures compliance with a set of cellular network standards. Without PTCRB certification, manufacturers run the risk that their devices are being blocked from North American networks.

PTCRB certification is applicable both for module manufacturers and end-product manufacturers. In case you integrate a PTCRB certified module into your mobile phone, Smartphone or M2M device, the end product in its final form factor has to be submitted to a PTCRB authorized test lab such as 7Layers, for testing and certification. However PTCRB certification alone is not sufficient to gain market access. Manufacturers also must fulfill:

- Regulatory requirements, specified by FCC for North America,
- Additional network operator requirements, depending on the network and technology involved.

RELY ON THE 7LAYERS EXPERIENCE AND LABORATORY STANDARDS

When turning to 7Layers for PTCRB certification, your are turning to the PTCRB specialist in the market.

Our people have been engaged in PTCRB right from the beginning and we are an active member of PTCRB and the PVG (PTCRB validation group).

The PTCRB certification database was designed on the basis of the InterLab Software System from 7Layers and is currently maintained by 7Layers.

Our laboratories in Germany, USA, Korea and China have been PTCRB accredited for many years and are working according to the latest PTCRB requirements.

7Layers has developed the InterLab Test Solution LTE-USIM/USAT which - amongst others - has been validated and is listed by PTCRB.

TURN TO 7LAYERS FOR A COMPREHENSIVE SERVICE PORTFOLIO

- Consultancy on PTCRB certification
- Consultancy on technical documentation
- Analysis of product compliance issues
- Consultancy on issue resolutions
- Conformance testing for GERAN, UTRAN and E-UTRAN (LTE) technologies in all required frequency bands
- Application enabler conformance and interoperability testing
- TTY conformance testing
- RF antenna performance testing
- Battery life testing
- EMC testing

PTCRB certification is administered by the CTIA via www. PTCRB.com.

1. SET-UP YOUR PTCRB USER-ACCOUNT

First time users must create a user account with the help of the "New User Registration" tab within the "Registered User Login" panel. 7Layers offer assistance for first time applicants every step of the way. To ensure your PTCRB certification runs smoothly take advantage of our experience from 1,000's of previous projects.

2. CERTIFICATION DATABASE ACCESS

Once you have received your user name and password you must send an e-mail to certification@ctia.org, requesting access to the PTCRB certification database. (This was developed and is maintained by 7Layers, based on the InterLab software system). The CTIA will then provide you with your login access.

3. CREATE YOUR PTCRB CERTIFICATION REQUEST

Go to www.PTCRB.com and submit your certification test request :

- Enter your company name
- Enter product information
- Choose the certification type: initial, variant or ECO certification request etc.
- Choose your 7Layers test laboratory: 7Layers Germany, 7Layers USA, 7Layers Korea, 7Layers China
- Receive your request number.



| Germany | + 49.2102.7490 |
|---------------|------------------|
| France | + 33.612.717.783 |
| Spain | + 34.634.507.296 |
| Israel | + 972.3.6450756 |
| P.R. of China | + 86.10.68050369 |
| Taiwan R.O.C. | + 886.2.29551270 |
| South Korea | + 82.70.88532301 |
| Japan | + 81.45.5340515 |
| USA | + 1.949.7166512 |

4. 7LAYERS LABORATORY ACCEPTANCE

Your chosen laboratory will receive notification of your certification testing request directly via www.PTCRB.com and your 7Layers project manager will accept the request.

The CTIA will send an invoice for a "Certification Administrator Fee". The amount depends on the type of certification and integrated technologies. It varies from US\$ 3,125 up to US\$ 12,500.

5. YOUR TEST PROJECT HANDLING

7Layers runs the project at its experienced PTCRB accredited test laboratories within the agreed time frame.

7Layers pre-requisites to begin testing:

- 7Layers has accepted your certification testing request
- You have settled a service agreement and purchase order with our project manager
- Test samples have been received by our lab

Once all required tests have been passed successfully:

- 7Layers uploads the test report to the PTCRB certification database.
- You must to upload information such as
 - Air interface compliance declaration
 - IMEI security declaration
 - PICS/PIXIT information
 - User manual
 - FCC iD

6. THE CTIA REVIEW

The test report and all uploaded documents will be reviewed by CTIA. The certification request status will be updated within the PTCRB database to "Under Review by CTIA". If you have settle the invoice within five working days CTIA will inform the manufacturer and the IMEI administrator of the certification decision.

7. CONFIRMATION AND CERTIFICATION

Now you are almost there! You will receive your certification approval by email from the PTCRB. This is shown on the PTCRB website (unless confidentially option is chosen).

7Layers has been handling PTCRB certification requests for years and as designers of the PTCRB database we thoroughly understand the process. You can rely on us for fast and efficient project handling and support.