

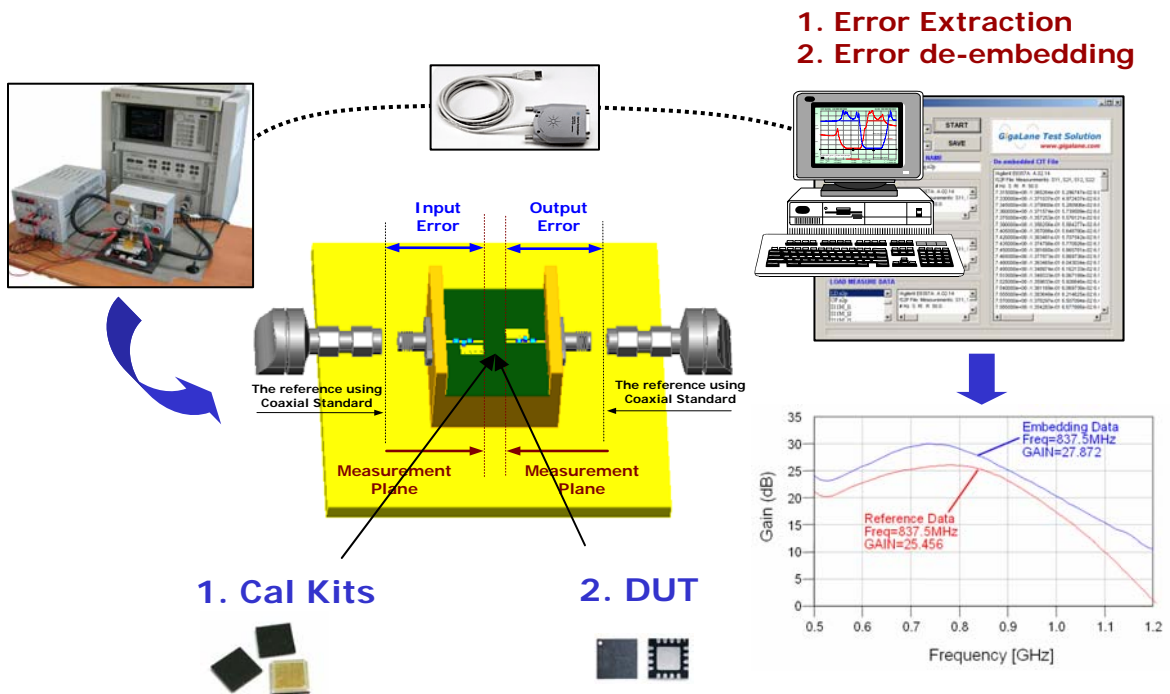
Components Test Solutions (De-embedding Tech.)

GigaLane offers total solutions of the **RF IC, RF TR, RF SAW, SMD Device testing**. Our products cover a whole spectrum of **calibration kits, test fixtures, de-embedding softwares with GPIB interface to VNA**. It provides high productivity and low cost for medium quantity RF device testing. Perfect transparency and repeatability are achieved by precision fixture measurements using our **SOLT calibration kits** followed the **fixture-error extraction software**.

Product Specification

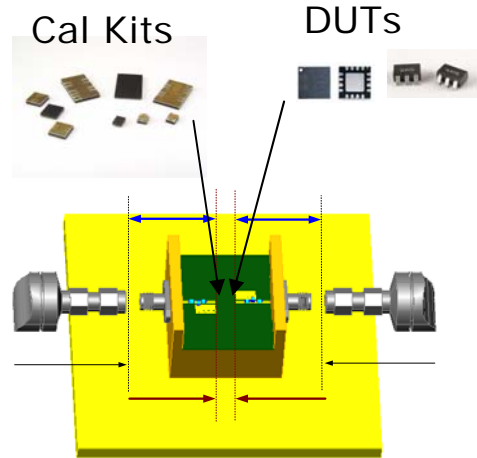
Parameters	Specifications
Frequency Range	DC ~ 50 GHz
Applicable Components	1. RF IC (MLF 32pin, 40pin, 48pin) 2. RF TR (SOT23, 26, 89, 86, 30, 323, 343, 363) 3. RF SAW Packages, Small RF Modules 4. Other customized package devices
Test Equipments	Vector Network Analyzer Noise Figure Meter, Impedance Analyzer

Test Procedures (RFIC for Handsets)



De-embedding vs. Calibration

In radio frequency, the signal integrity can be severely deteriorated even by insignificant discontinuities of the signal flow. RF SMD test requires test fixtures transparent through the signal flow. Many imperfection errors of the test fixtures are perfectly eliminated using GigaLane's de-embedding solutions. Perfect transparency and repeatability are achieved by precision fixture measurements using our SOLT kits followed the fixture-error extraction using our software. The generated error files(touchstone and CITI file format) can be simply plugged into all of network analyzers(PNA/ENA) and design softwares.

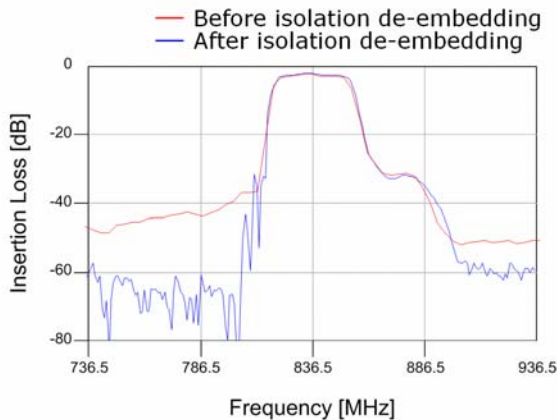


Fixture error can be completely removed using the de-embedding technique

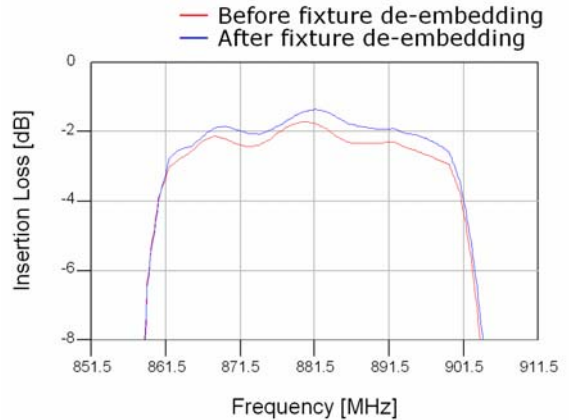
De-embedding using External S/W	Calibration in RF Analyzers
<ul style="list-style-type: none"> • Uses raw measured data of cal. standards • Inherently-accurate algorithm • Easy and low cost fabrication of standards 	<ul style="list-style-type: none"> • Uses modeling of measured cal. standards • Uncertainty of standards definition • Requires precision impedance devices

De-embedding Results (RF SAW for CDMA)

- Stop band Improvement (Unbalanced Saw Filter)- Pass band Improvement (Balanced Saw Filter)



GigaLane solved isolation problem of the test fixture.



GigaLane solved imperfection problem of the test fixture.