

Keysight Technologies

N7300 Series Chipset Software

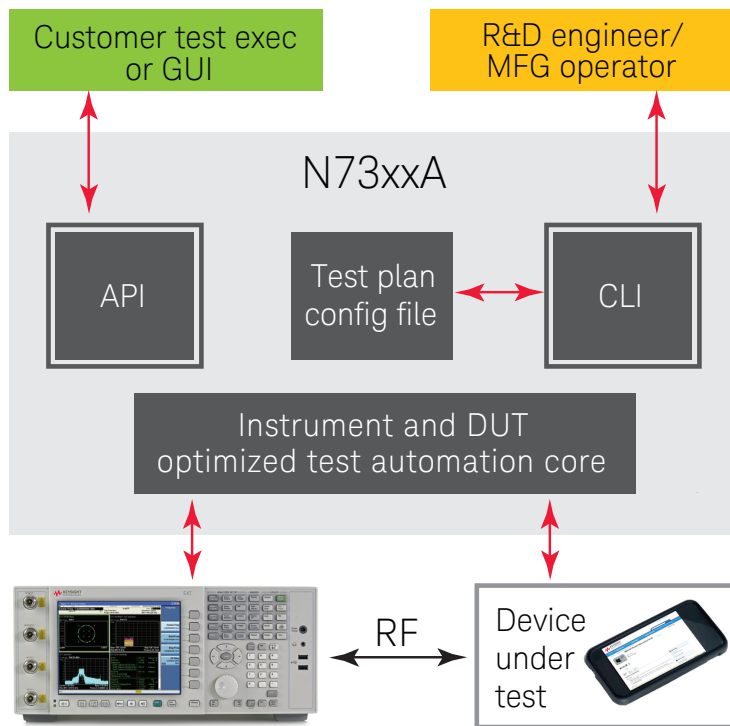
Chipset Automation Software for WiMAX™,
WLAN (WiFi), *Bluetooth*®, and Femtocell
Device and Module Test

Technical Overview



Unlocking Measurement Insights

Introduction



E6607A, N4010A, N8300A, N9020A/N9010A
in conjunction with N5182A/62A or E4438C

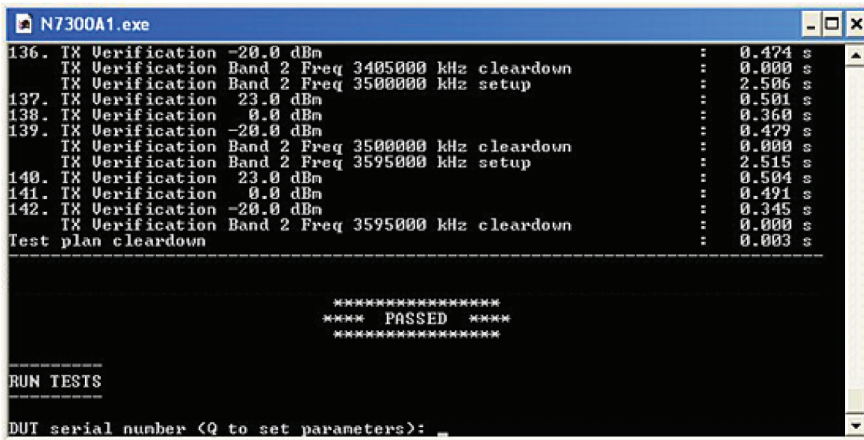
- Quick and easy optimization of WiMAX, WLAN, *Bluetooth*, and Femtocell devices and module testing
- Simple and reliable setup for fast, accurate, and repeatable measurements through your choice of CLI or API
- Unique version for each chipset provider's device—with new chipsets continually being added
- Control measurement parameters for calibration and verification
- Choose what to do with the results/logs

N7300 Series Software: CLI and API User Interfaces

Designed for use with the N4010A wireless connectivity test set, E6607A EXT wireless communications test set, N8300A wireless networking test set, N9020A MXA or N9010A EXA signal analyzer in conjunction with the N5182A/62A MXG or E4438C ESG vector signal generator, the N7300 Series chipset software performs fast and accurate wireless production test for today's—and future—wireless devices and modules.

The two main use models for the N7300 Series software are:

1. Use the command line interface (CLI) application for stand-alone device calibration and verification. A simple test plan configuration can be implemented using the setup.ini file.



```

N7300A1.exe
136. TX Verification -20.0 dBm : : 0.474 $
TX Verification Band 2 Freq 3405000 kHz cleardown : : 0.000 $
TX Verification Band 2 Freq 3500000 kHz setup : : 2.506 $
137. TX Verification 23.0 dBm : : 0.501 $
138. TX Verification 0.0 dBm : : 0.360 $
139. TX Verification -20.0 dBm : : 0.479 $
TX Verification Band 2 Freq 3500000 kHz cleardown : : 0.000 $
TX Verification Band 2 Freq 3595000 kHz setup : : 2.515 $
140. TX Verification 23.0 dBm : : 0.504 $
141. TX Verification 0.0 dBm : : 0.491 $
142. TX Verification -20.0 dBm : : 0.345 $
TX Verification Band 2 Freq 3595000 kHz cleardown : : 0.000 $
Test plan cleardown : : 0.003 $
-----
*****
**** PASSED ****
*****
-----
RUN TESTS
-----
DUT serial number <Q to set parameters>:
  
```

Figure 1. The test plan completion results from running N7300A1.exe

2. Interface to the N7300 Series software's application programming interface (API) via the user's own test executive.

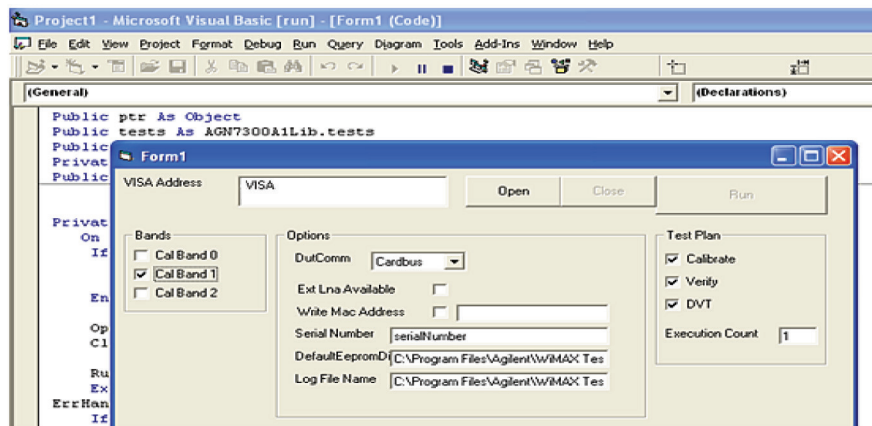


Figure 2. N7300 Series software API system integration into customer's test executives

The N7300 Series software's high-level API allows:

- Programmatic configuration of the calibration/verification test plan setup
- Control of the N7300 Series software
- Extraction of data and results to databases/logs for further analysis

In both use models, by providing an easy way of combining instrument and DUT control, Keysight Technologies, Inc. is shortening the test development process and promoting the fastest time-to-market. This is achieved by working with the chipset vendor on optimizing the calibration routine and test plan automation, removing the need for the end user to do this.

Ordering Information

The N7300 Series chipset software provides fixed, 3-month, or transportable licenses for the following chipsets. Licenses can be ordered at the time of instrument purchase or at a later date. To assist with the test software development, an Installation Guide, User/Reference Guide, and COM (Microsoft's Component Object Model) Help are provided for each licensed software product. N7399B silicon vendor encrypted waveform licenses are designed to playback N7300 Series waveforms on one box testers or signal sources. N7399B licenses are the default for all WiMAX and Femtocell N73xxA purchases and will be automatically added to your order.

Fixed, perpetual license	Fixed, 3-month license	Transportable, perpetual license
N7300A-1 chipset software for Beceem BCS200/BCSM250/BCS5200		
N7300A-1FP	N7300A-1F3	N7300A-1TP
N7300A-2 chipset software for Beceem BCSM350/BSCM352/BCS5350		
N7300A-2FP	N7300A-2F3	N7300A-2TP
N7302A-1 chipset software for SQN1130 and MAX283x		
N7302A-1FP	N7302A-1F3	N7302A-1TP
N7302A-2 chipset software for SQN1130 and PM880x/885x		
N7302A-2FP	N7302A-2F3	N7302A-2TP
N7302A-3 chipset software for SQN1130 and SQN1140/5		
N7302A-3FP	N7302A-3F3	N7302A-3TP
N7302A-5 chipset software for SQN12x0		
N7302A-5FP	N7302A-5F3	N7302A-5TP
N7303A-1 chipset software for CSR9000 series, CSR6000 series, and BlueCore7		
N7303A-1FP	N7303A-1F3	N7303A-1TP
N7303A-1NP (for N4010A only)		
N7303A-1N3 (for N4010A only)		
N7304A-1 chipset software for ALT2150 and MAX2839		
N7304A-1FP	N7304A-1F3	N7304A-1TP
N7306A-1 chipset software for Broadcom BCM4325		
N7306A-1FP	N7306A-1F3	N7306A-1TP
N7306A-3 chipset software for Broadcom BCM4329		
N7306A-3FP	N7306A-3F3	N7306A-3TP
N7307A-1 chipset software for TI WL1271/3		
N7307A-1FP	N7307A-1F3	N7307A-1TP
N7309A-1 chipset software for Percello PRC6000 and MAX2547/99		
N7309A-1FP	N7309A-1F3	N7309A-1TP
N7309A-2 chipset software for Percello PRC6000 and ADI RFIC (AD9936/ADF4602)		
N7309A-2FP	N7309A-2F3	N7309A-2TP
N7311A-1 chipset software for Atheros AR6003		
N7311A-1FP	N7311A-1F3	N7311A-1TP
N7311A-1NP (for N4010A only)		
N7311A-1N3 (for N4010A only)		

The software can be downloaded at www.keysight.com/find/n7300. The password provided with the license redemption certificate is required to download the software.

Product Configuration

Keysight N7300 Series chipset software are cross-instrument solutions that are supported on the Keysight N9020A MXA and N9010A EXA signal analyzers, N5182A/62A MXG and E4438C ESG signal sources, and the E6607A EXT, N4010A, and N8300A one box test set hardware.

Technologies supported	Chipset vendor	Model	Instruments supported						
			One box testers			Signal analyzers		Signal sources	
			N4010A*	N8300A	E6607A	N9020A	N9010A	E4438C	N5162A/82A
WiMAX 802.16	Beceem	N7300A-1	–	√	–	√	√	√	√
		N7300A-2	–	√	√	√	√	√	√
	Sequans	N7302A-1	–	–	–	√	√	√	√
		N7302A-2							
		N7302A-3							
N7302A-5									
Altair	N7304A-1	–	√	–	√	√	√	√	
WLAN 802.11/ Bluetooth	CSR	N7303A-1	√	√	–	–	–	–	–
	Broadcom	N7306A-1	√	√	–	–	–	–	–
		N7306A-3							
	Texas Instruments	N7307A-1	√	√	–	–	–	–	–
Qualcomm Atheros	N7311A-1	√	√	–	–	–	–	–	
Femtocell	Percello	N7309A-1 N7309A-2	–	–	–	√	√	√	√

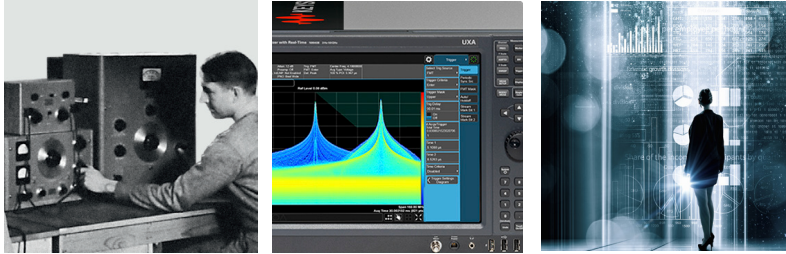
* N4010A supports fixed perpetual and 3-month licensing options and does not support transportable licensing. Other instruments support fixed perpetual, 3-month, and transportable perpetual licensing options.

Related Literature

N4010A Test Solutions, brochure, literature number 5989-4150EN
EXT Wireless Communications Test Set, brochure, literature number 5990-7156EN
N9020A MXA X-Series Signal Analyzer, brochure, literature number 5989-5047EN
N9010A EXA Signal Analyzer, brochure, literature number 5989-6527EN
MXG Signal Generators, brochure, literature number 5989-5074EN
E4438C ESG Vector Signal Generator, brochure, literature number 5988-3935EN

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