

## Availability of Fabrication and Testing Facilities for Planar Microwave Components

Microstrip antenna fabrication and Measurements are done over common variants of regular substrates and connectors at a nominal cost.

We provide Vector Network Analyser measurements of S parameters upto 3 GHz.

We also provide two week Internship on “**Design, Fabrication and testing of RF Components**” at a nominal fee.

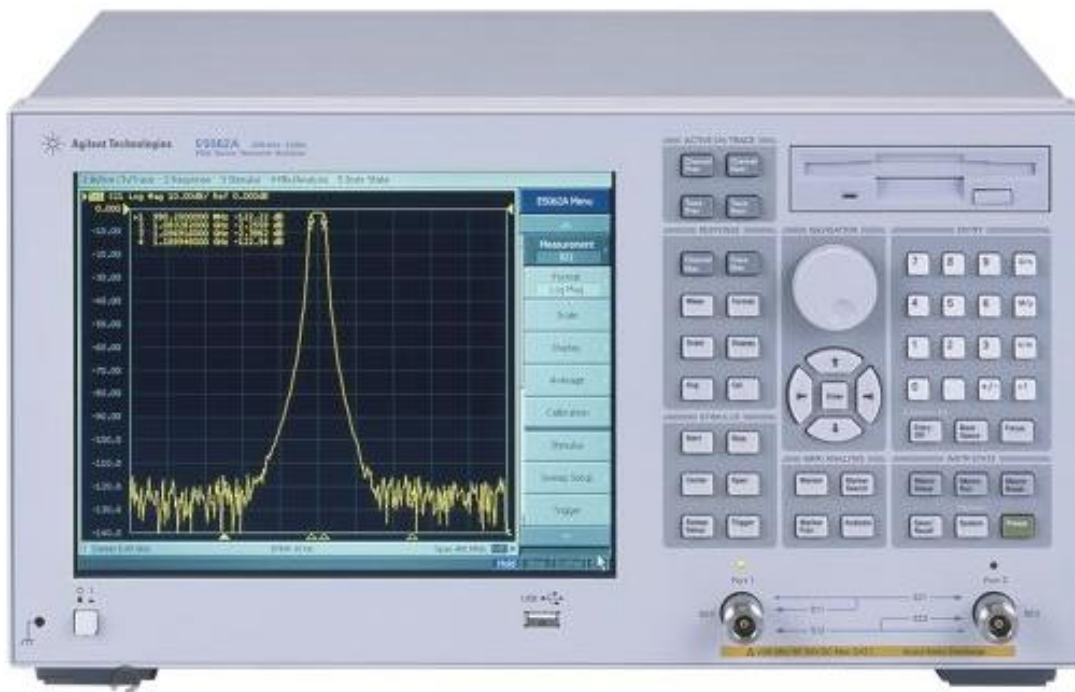
We have sophisticated fabrication facility provided by PCB Prototyping Machine. The PCB MATE 300 watts Prototype & Antenna fabrication machine is used to make a prototype PCB board. We can make Engraving, Hatching, Milling, Drilling, and Cutting.



We have a complete test setup comprising of Agilent E5062A ENA-L RF Network Analyzer, Agilent Vector Signal Generator – Agilent/Keysight N5182A MXG, Range-100KHz - 3GHz, Agilent/Keysight N9010A-503 EXA 10 Hz to 3.6 GHz Vector Signal analyzer along with VSA application software.



## Agilent/Keysight E5062A ENA Network Analyzer



The E5062A general purpose network analyzers provide reliable basic S-parameter measurements with easy-to-use features and solid performance based on the latest in modern technologies. The ENA, with its 115 dB dynamic range and 0.005 dB RMS trace noise, provides the accuracy and speed required for many network measurement applications. The wide 30 kHz IF bandwidth (IFBW) and powerful digital processing provide unprecedented measurement speed. The S-parameter test set options offer full two-port calibration for optimum accuracy. The affordably priced ENA, equipped with the core functions of the industry-standard ENA, includes many easy-to-use features and is optimized for efficient measurements and high reliability.

### Features:

- 300 kHz to 3 GHz
- Integrated T/R or S-parameter test set
- 50 or 75 ohm test port impedance
- 120 dB dynamic range and 0.005 dB rms trace noise
- Built-in Visual Basic for Applications (VBA)

## Agilent/Keysight N9010A-503 EXA 10 Hz to 3.6 GHz Vector Signal analyzer

The N9010A-503's speed and accuracy, coupled with its unprecedented performance and application coverage, provides ease to analyze complex and time-varying signals. The N9010A-503 EXA seamlessly integrates a broad range of standards-based measurements with Keysight's (formerly Agilent) industry leading 89600 vector signal analysis (VSA) software all in a single instrument. In addition to the use of an open Windows XP Professional operating system, the Keysight N9010A-503 EXA provides an advanced signal analysis user interface.



All measurement features and functions are intuitively grouped and accessible from the front panel or via a USB keyboard and mouse. The N9010A-503 EXA signal analyzer comes with optional measurement application software which provides preconfigured test routines for 802.16e Mobile WiMAX, W-CDMA, HSDPA/HSUPA, GSM/EDGE and phase noise applications. Running the 89600 VSA software application in the EXA enables advanced signal demodulation analysis and troubleshooting of more than 50 demodulation formats including: 2G, 3G, 3.5G, WiMAX, WLAN, and Private Mobile Radio.

### Features are

- Frequency range – 10 Hz to 3.6 GHz.
- Up to 300% faster than other economy spectrum and signal analyzers
- 4 ms marker peak search
- 75 ms measurement/mode switching speed
- 11.4 ms remote sweep and transfer (GPIB)
- 0.3 dB absolute amplitude accuracy
- 13 dBm third order intercept (TOI)
- -146 dBm/Hz displayed average noise level (DANL)

## Vector Signal Generator –Agilent/Keysight N5182A MXG, Range-100KHz - 3GHz



Featuring fast frequency, amplitude, and waveform switching, industry-best ACPR performance, high reliability, and simplified self-maintenance the instrument is optimized for manufacturing cellular communications and wireless connectivity components. With scalable RF and baseband performance, it is easily configured to meet your specific test needs. With the industry's best combination of high power and distortion performance, signal generators ensure accurate component design verification. When combined with flexible signal creation tools such as Signal Studio software, the low ACLR (-73 dBc at +5 dBm for 1 carrier W-CDMA) makes the MXG a complete solution for W-CDMA, WiMAX, and more.

### Key Features

- Frequency ranges – 100 kHz to 3 GHz with 0.01 Hz resolution.
- Fast switching speeds – < 1.2 ms in SCPI mode.
- Simultaneous frequency, amplitude and waveform switching at < 900 us in list mode.
- 3GPP W-CDMA at < -76 dBc for a 1-carrier signal and < -70 dBc for a 4-carrier signal.

### For further details

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