

3-Port De-embedding and S3P collection method

Calibration extended to the yellow lines on U1 using a blank EVB. Network Analyzer cable calibration length is now augmented to include trace lengths.

Device is mounted and de-embedded 3-Port S-Parameters are gathered. Bias-Ts internal to the Network Analyzer are used to provide Voltage to Port3 and Port2 and though Pin#12 bias feed.

During S3P Data collection:

J2 Header Ven1=5v, Ven2=5v, Vcc2 is connected to Pin#12 via 0Ω resistor on M12, this voltage is the same as Vcc1&2(the voltage we sweep)

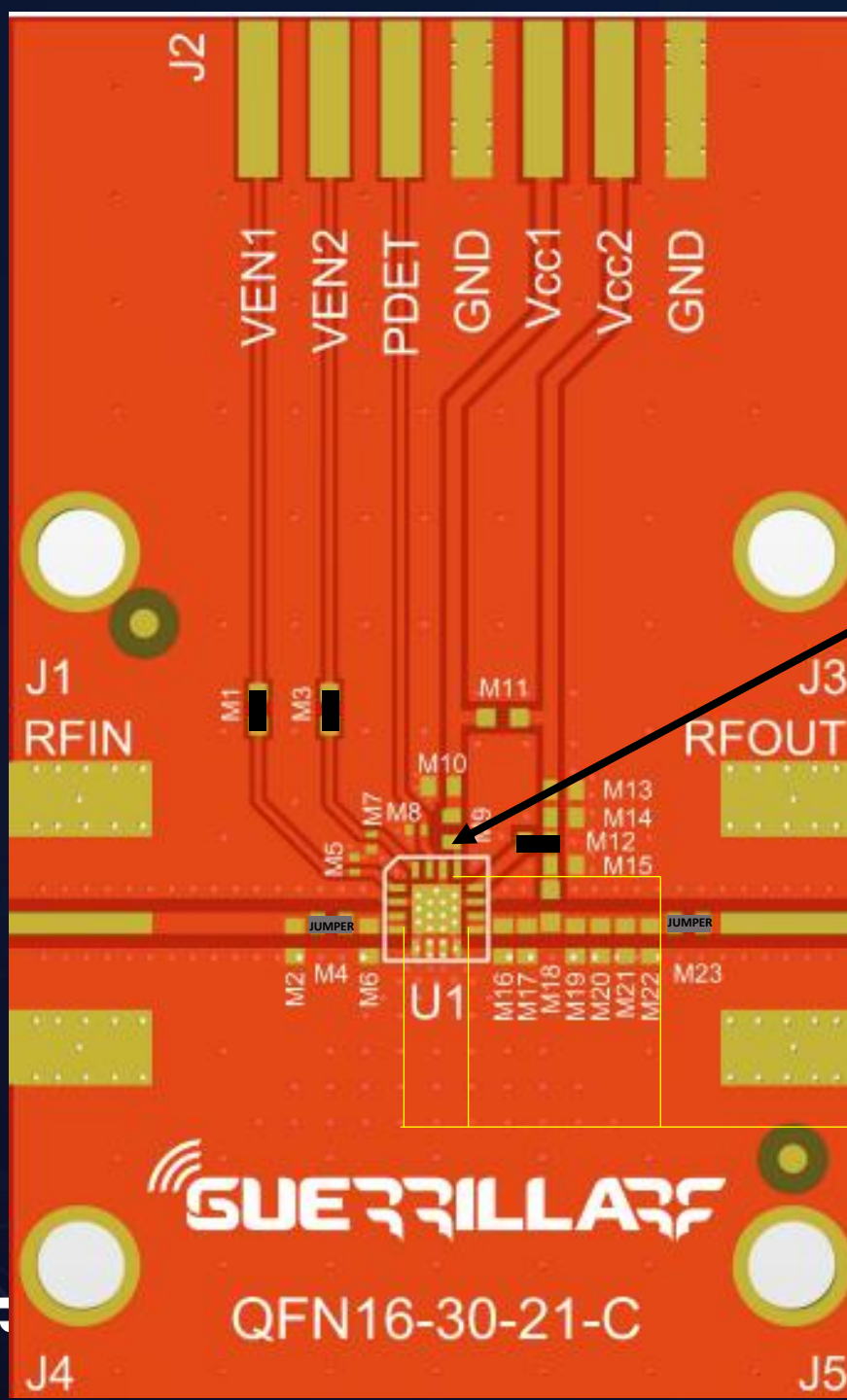
Port2 Connection supplies Stage 1 of the PA and Port 3 supplies Stage 2. Ports 2 and 3 use the same voltages, which are swept, to provide more varying S3P files to suit different supply voltages customers may use.

M1=3.3kΩ
M5=6.8kΩ
M13=0Ω

Network
Analyzer
Port2 via.
SMA pigtail

Network
Analyzer
Port3

Calibration on the Network Analyzer extends cal to the U1 site as shown using Port Extension Feature on the Network Analyzer. (open and short to correct calibration reference plane).



Network
Analyzer
Port1