N5106A-01A

S E R V I C E N O T E

Supersedes:
N5106A-01

N5106A (PXB) MIMO Receiver Tester

Serial Numbers: US48360104 – US48360109, US48360112 – US48360121, US48360123, US48360125 and MY48360101 – MY48360114, MY48360117, MY48360119, MY48360121 - MY48360125

N5106A Falsely triggering waveform play / start:
N5106A is set to use an External Trigger and the "play" button has been pressed. The unit will start waveform play without trigger applied if the trigger generator has an impedance of 1 Mohm or greater.

Parts Required:

P/N	Description	Qty.
0699-3947	1Kohm Resistor	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	[ ] ON SPECIFIED FAILURE X AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours	
LOCATION CATEGORY:	[ ] CUSTOMER INSTALLABLE X ON-SITE X SERVICE CENTER [ ] CHANNEL PARTNER	SERVICE INVENTORY: [ ] RETURN [ ] SCRAP [ ] SEE TEXT	USED PARTS: [ ] RETURN [ ] SCRAP [ ] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: 5 February 2010	
AUTHOR: MJW		PRODUCT LINE: PL15	
ADDITIONAL INFORMATION: All Customer units have been modified INTERNAL AGILENT ONLY – Warranty charge approved, even if no warranty in Seibel system.			

February 13, 2009

Agilent Technologies

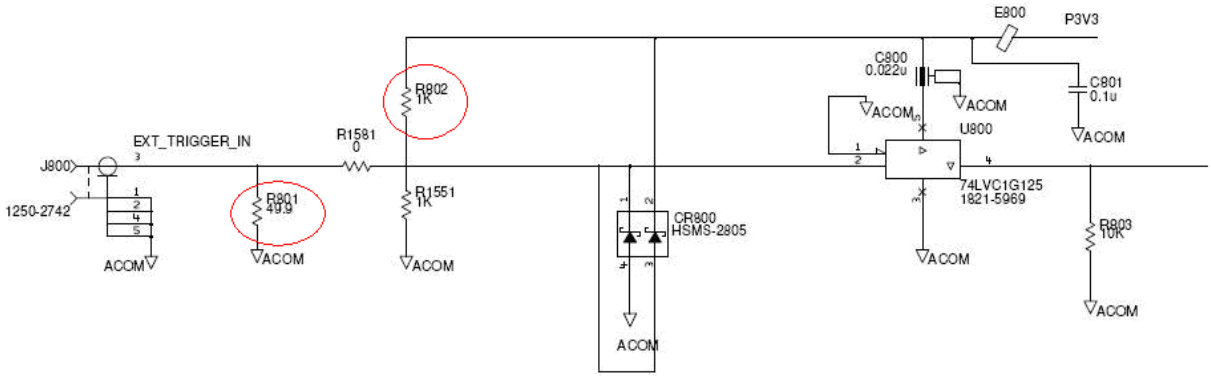
Situation:

When the N5106A (PXB) is set to trigger on an external hardware signal, and the user presses the "play" button, the PXB will falsely trigger. The unit will not wait for a valid trigger signal and start waveform play. This problem can occurs when the output impedance of the customer's trigger generator is greater than 1 MOhm.

Solution/Action:

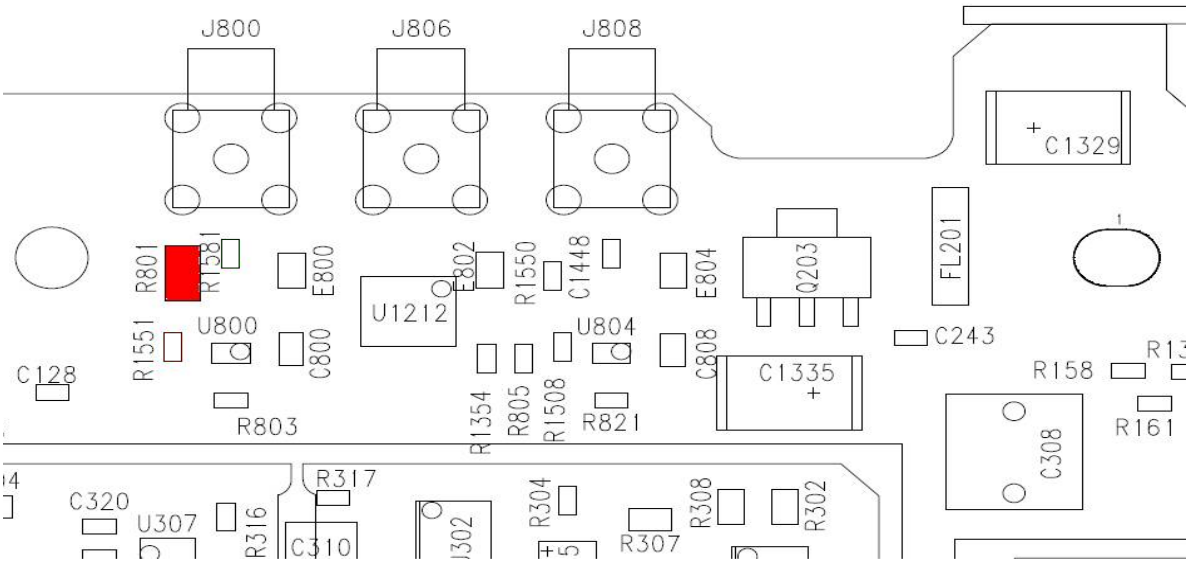
Remove resistors R801and R802 from the A11 System Clock board (N5105-60006). This will change the External input impedance to 1 Kohm.

Schematic: REAR PANEL

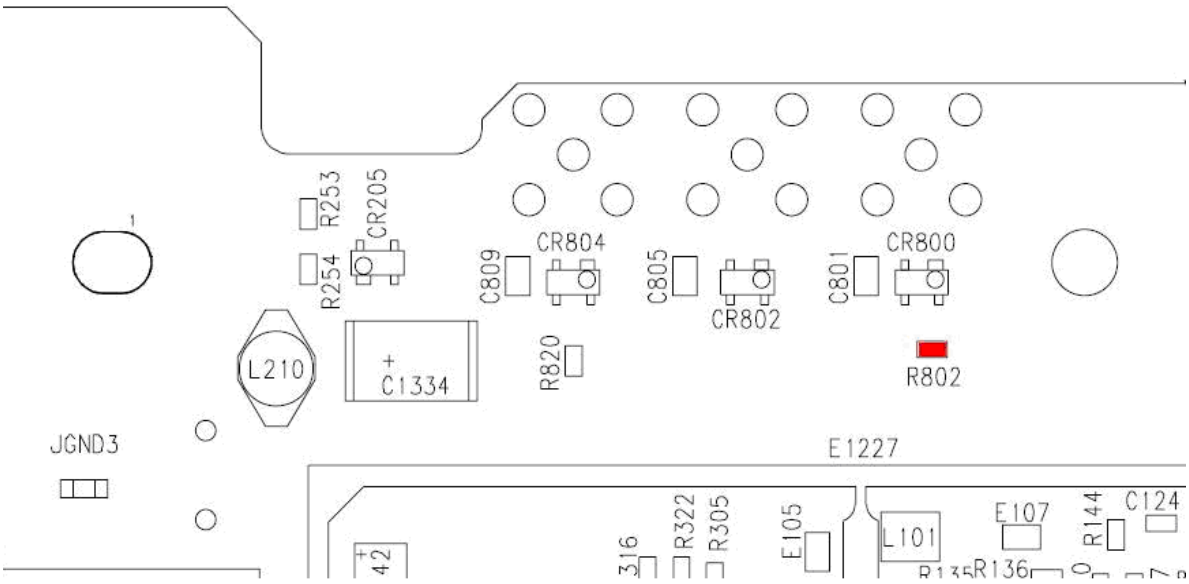


Remove R801 and R802 (RED circled components)
R1551 is a 1 KOhm resistor and this needs to remain in place.
If R1551 is missing install the 1 Kohm resistor (PN: 0699-3947) Resistor R1551 needs to be in place for the external trigger to work correctly.

Top side component layout of the N5105-60006 board: Remove the red resistors R801



Bottom side Layout: Remove the red resistors R802



Validate /Retest:

Turn power on to the N5106A and use an ohm meter to measure the center pin of the Ext Trigger in on the rear panel. The resistance should measure 1 Kohm +/- 100 ohm.

Run a complete Self test.

Set up the N5106A to a single channel play back. Refer to the Guided Service and Support manual “Manual verification test” on how to set up the unit and equipment required.
Change the “Trigger source” to Hardware before you press Play on the N5106A.

Once you press play the system should wait for an external trigger to be applied before the waveform with play.
Use a pulse generator to send a 50Usec pulse that has an amplitude of 1.6volts to the External trigger input. Verify that the waveform starts to play.
If using a pulse generator that has an output impedance of 1Mohm or greater use an amplitude of 2.5 volts.