PA Compression Test status , schedule for tomorrow /cr/

Nick Lalic to: jerome.sirois, Michael Guyonnet 12/10/2015 12:39 PM
Cc: Wayde Marshall, Greg Bonaguide

Jerome, Michael, Wayde,

First of all, we need to coordinate with Wayde on picking up the ZVA from the lab here at M/A-COM. Jerome, you may be out tomorrow, so, Michael, hopefully I can coordinate with you? My mobile phone number is listed in the sign-off below this email.

Secondly, it might help for me to put into writing where I understand we are at as a reference moving forward, and to allow Jerome and Michael to provide additional feedback if something comes to mind.

This is what I have outstanding:

Speed
Speed is much closer to expectation, but still has room for improvement compared to our competitor's GCA application. I will investigate any improvements I may be able to make.

Compact GUI
The easiest use case is to leave the GUI up on the screen and out of the way while manually operating the VNA. To this effect, collapsing certain less-often-used settings to minimize screen size is important.

Skip progress plot (if fast enough), update plots automatically
Having to manually instruct the application to update plots is a pain. There should be a "set it and forget it" option.

Save multiple setting profiles
PA Compression Test may be used with multiple projects. Being able to recall different configurations easily would be a plus.

Save measurement settings to text file
For traceability purposes, it would be useful to also save measurement info (pulse conditions, averaging, calibration, etc) along with the data in a text file.

Power Added Efficiency (PAE)
If there were a way to integrate a PAE measurement into PA Compression Test, that would be very convenient and a competitive advantage for Rohde & Schwarz.

General ZVA Question : After a manual sweep finishes , is RF Off?
After doing some research, it looks like this may be an option on the ZVA. I will need to follow up on this to confirm.

Generate a GCA-like CSV file

Plot data vs measured Pin values (via x-axis reinterpolation)

Plot measurements vs Pout (via x-axis reinterpolation)

Miscellaneous GUI cleanup :
* **Window position , layout, sizing**
* **Remember previous plot settings**
* **Perform user input validation on plots list (invalid inputs are not currently checked)**

Debug and Test Plot Options

Additional testing with hardware under pulsed conditions

If there is anything I am missing please let me know.

Also, as I understand it the most important items are: speed, plotting vs measured Pin, and the GCA-like CSV file. Adding PAE is a long-term item. Adding multiple save profiles may also need to be pushed off to a second iteration. The other items are to be completed by the end of the year.

Given our progress this week, I think this is a reasonable plan.

Thanks again everyone for all your feedback and help!

Best Regards,
Nick Lalic

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