

PAD Power Setup

The PAD Power spreadsheet uses complex numbers to calculate gain and phase in the Stability sheet. This requires Add-ins which are often not loaded with the default Excel installation. This results in error messages in some cells and missing curves in graphs. The following procedure usually eliminates these errors. Installing the Add-ins is a one time event; PAD Power should then run every time it is called up.

Procedure:

From the Menus at the top, select Tools.

The screenshot shows the Microsoft Excel interface with the 'Tools' menu open. The 'Add-Ins...' option is highlighted. The spreadsheet content is as follows:

	A	B	C
1	Application Definition Note		
2	Model	PAD113	Comp Cap
3	Voltage control with a capacitive load		
4			
16	Closure Frequency=	549.540874	
17	1/Beta DC gain	34.1514035	
18	1/Beta DC + noise gain	49.6805027	
19	1/Beta AC gain	28.299467	
20	Choosing component values:		
21	CF pole with RF to be:	5	
22	Rfstop zero/CF to be:	170	
23	C12 pole with R12 to be:	1.6	
24	RN for 1/Beta AC of:	54.1514035 dB	= 108.9325 ohms
25	CN pole with RN to be:	1.6 KHz	= 504933.2 pF or 504.9332 nF or

This should result in the Add-in window where both Analysis Toolpak options can be checked.

Microsoft Excel - PAD_Power_.xls

File Edit View Insert Format Tools Data Window Help

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Reply with Changes... End Review...

D3

1	Application Definition		Note	ERR
2	Model	PAD113	Comp Cap=	10 pF
3	Voltage control with a capacitive load			
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16	Closure Frequency=	549.540874	KHz	
17	1/Beta DC gain	34.1514035	dB, noninvert	
18	1/Beta DC + noise gain	49.6805027	dB or noise	
19	1/Beta AC gain	28.299467		
20	Choosing component values:			
21	CF pole with RF to be:	5 KHz =	636.6198 pF or	0.6366198 nF or
22	Rfstop zero/CF to be:	170 KHz =	9.36E+08 K Ω	9.362E+11 Ω

Add-Ins

Add-Ins available:

- Analysis ToolPak
- Analysis ToolPak - VBA
- Conditional Sum Wizard
- Euro Currency Tools
- Internet Assistant VBA
- Lookup Wizard
- Solver Add-in

Solver Add-in
Tool for optimization and equation solving

OK Cancel Browse... Automation...

Click OK, and the spreadsheet should run.