

Guidelines for simulation in ADS using ADS dynamic link with ADS encrypted models in a PDK context

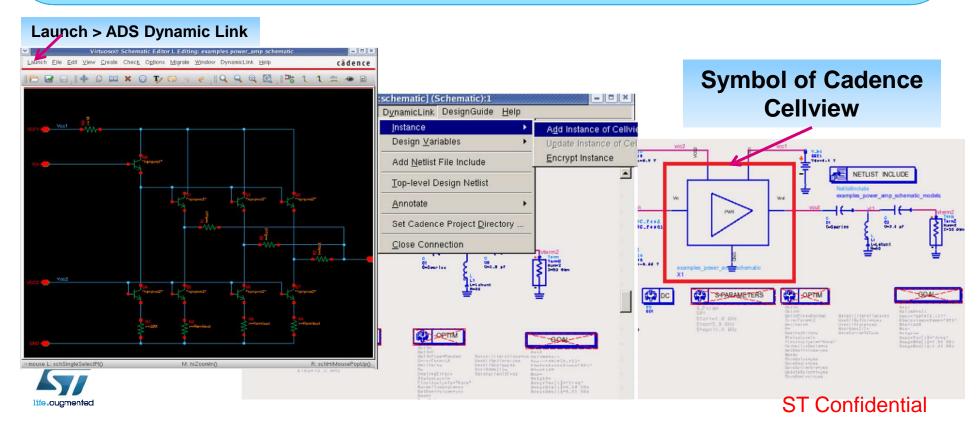


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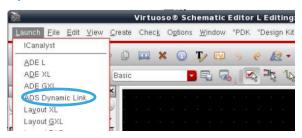


ADS Dynamic Link Feature

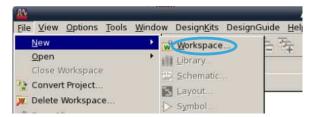
- Using the *DynamicLink > Instance > Add Instance of Cellview* ADS menu, only Cadence instance of a design could be added in ADS, not a full schematic.
- If a symbol already exists for the design in Cadence, the symbol geometry is duplicated in ADS; otherwise the Cadence symbol generator is automatically invoked to generate a Cadence symbol, which is then automatically duplicated in ADS
- A tutorial is available on-line in the ADS documentation
 - qthelp://ads.2016.01/doc/dynlnkug/Getting_Started_with_RFIC_Dynamic_Link.html



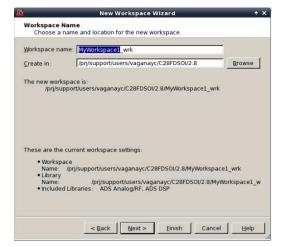
- In Cadence environment, from your desired schematic, launch ADS Dynamic Link
 - Launch -> ADS Dynamic Link



- In ADS create a new Workspace:
 - File -> New -> Workspace



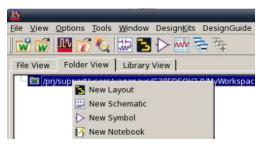
Click Next and then Finish





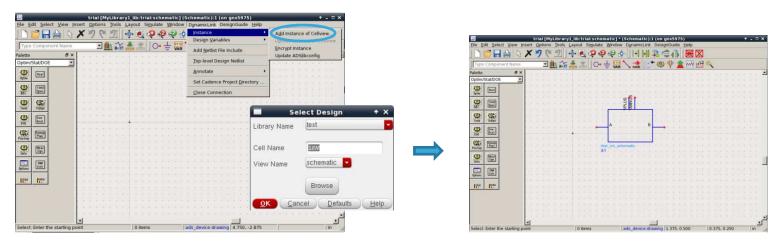
How to simulate in ADS by using ADS Dynamic link

Open a new ADS schematic view



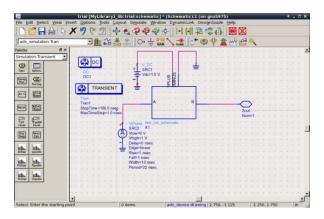


- Import your Cadence top instance in the ADS new schematic window using the ADS menu:
 - DynamicLink -> Instance -> Add Instance of Cellview
 - A dialog box appears, allowing the selection of a Cadence design
 - If a symbol already exists for the design in Cadence, the symbol geometry is duplicated in ADS; otherwise the Cadence symbol generator is automatically invoked to generate a Cadence symbol, which is then automatically duplicated in ADS

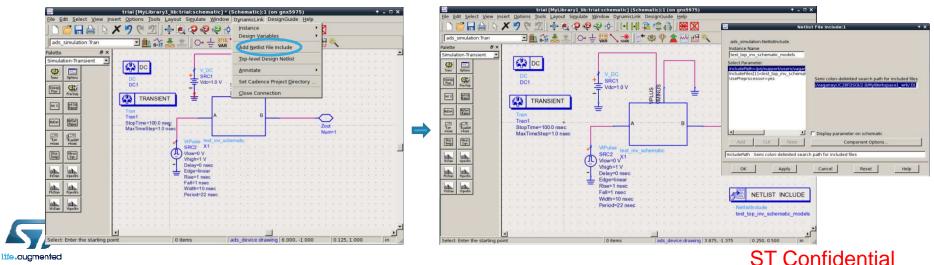




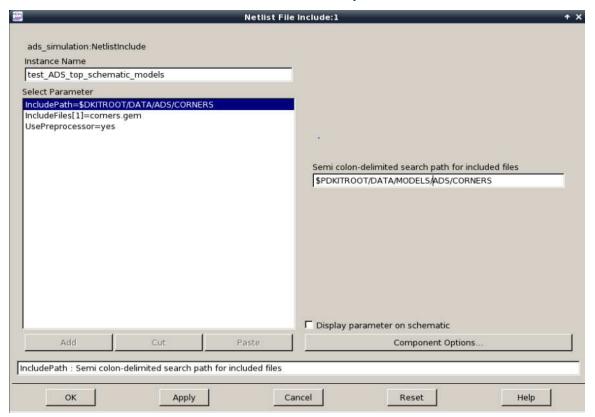
Complete your top design in ADS (define your testbench)



- Adding models Files (1/3)
 - To add the ADS model file
 - Choose DynamicLink -> Add Netlist File Include
 - Place the **Netlist Include** component in an open area on the schematic.
 - Double click the include component icon. The Netlist File Include dialog box appears.



- Adding models Files (2/3)
 - Change the IncludePath and IncludeFiles parameters as follows:



corners.gem file defined in **\$PDKITROOT/DATA/MODELS/ADS/CORNERS** directory contains all the ADS models (typical corners by default) and flags (global and mismatch flags set to zero by default) needed for the simulation.

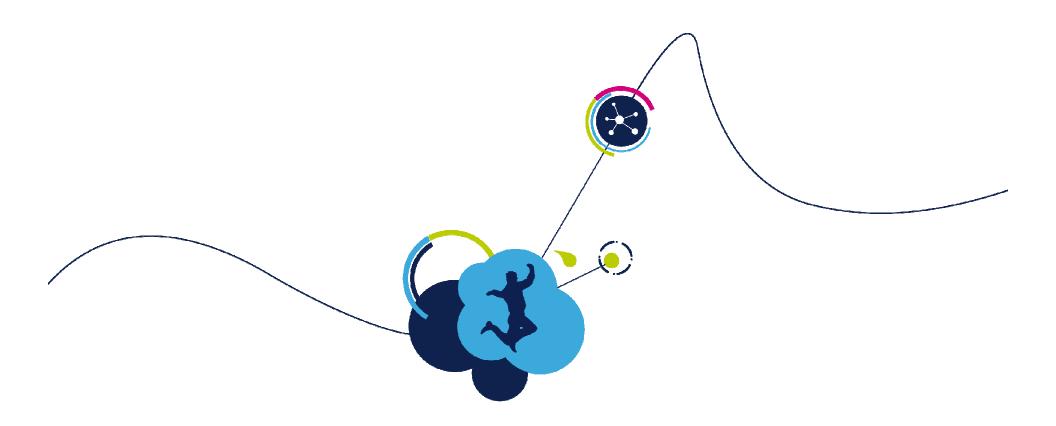


- Adding models Files (3/3)
 - <u>In the delivered ADS module</u>, some models are now encrypted in a specific library called *DK_28FDSOI_RF_MMW.library*.

You need to copy the file **ADSlibconfig** that contains the path to this library from **\$PDKITROOT/DATA/MODELS/ADS/CORNERS** to your **working directory** (ADS workspace created at the beginning)

> Then you can launch your simulation in ADS: Simulate -> Simulate





Thank you

