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# MBP

## Loading Multi-Die Data in MBP

**Application Note** 

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## Loading Multi-Die Data in MBP Application Note

This application note describes how to set up the script-based environment so that MBP can load and utilize ET data. **Note**: This document was originally released for MBP V2011.1.0 and above in October 2011.

#### Introduction

Besides the single sweep data (.mea) and single point data (.dp), there is also a multi-die data structure called ET data. This kind of multi-die data is important for retargeting the final SPICE model and monitoring final corner models.

MBP has the ability to deal with this type of ET data. In this document, we describe how to set up the script-based environment so that MBP can load ET data and use it to run simulation. For more information go to www.agilent.com/find/eesof or contact your local Agilent office. The complete list is available at: www.agilent.com/find/contactus.

### Script-based Environment Setup

The user can complete the script-based environment setup by following these steps:

#### Step 1. Un-Zip

The default.7z is actually the sample script code package for loading ET data. It can be un-zipped anywhere the user wants. It contains the folders and files shown in Figure 1.

Commands	
🚞 data	
🛅 flow	
🚞 imv	
🚞 prog	
🚞 sys	
📷 commands. gjt	1 KB
📷 data. djt	1 KB
🖬 flow. gjt	1 KB
📷 init. jt	1 KB
📷 jt. prj	0 KB
📷 setup. jt	0 KB

Figure 1. Script code package

#### Step 2. Start a New Project

Choose File -> Project -> New from the main menu. Doing so will start a new project.

#### Step 3. Load the Script Project File

The user must choose *Script -> Script Project* from the main menu to pop up the *MBP Script* window as shown in Figure 2. Click the *Open* icon. Then, load the file "*jt.prj*" in the folder where the user just unzipped.

🕖 IBP Script			
File Edit Debug			
🥺 📙 💕 🕨 🔳 🕨			
Project Debug		(	<b>⊲</b> ⊳∙
↑ Project 			
Root IMV Flow Data System			
Description	Resource	Location	

Figure 2. MBP Script window

### Step 4. Load ET Data

A new menu, *ERData -> Load*, should now be added under *Script* from the main menu. Choose to load the ET data (multi-die data), as shown in Figure 4.

#### Step 5. Run the Script Project

After loading, choose the *load\_etdata* item by clicking *Project -> default -> sys -> gui -> menu -> load\_etdata* (Figure 3).

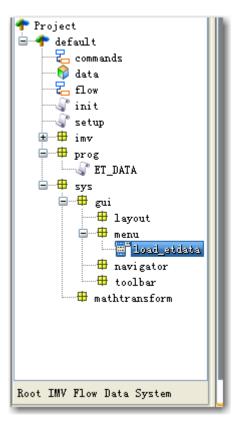


Figure 3. load\_etdata

#### Step 6. Load ET Data

A new menu *ERData -> Load* should now be added under *Script* from the main menu. Choose to load the ET data (multi-die data), as shown in Figure 4.



Figure 4. Load ETData

#### Step 7. Plot ET Data

Go to the IMV page and refresh the IMV tree. Here, the user will find the "Idsat\_I\_et" example, as shown in Figure 5.

□	idsat_l idsat_l_et idsat_w idsat_w_et idsat/w_w			
w	vgg	vdd	vbb	vdl
<b>w</b> 0.22 עד	vgg 1.8V	vdd 1.8V	vbb OV	vd] 0. 05 🔨
0.22um	1.8V	1.8V	ov	0.05 🔨
0.22um 0.24um 0.3um	1.8V 1.8V	1.8V 1.8V	OV OV	0.05 🔨 0.05
0.22um 0.24um	1.8V 1.8V 1.8V	1.8V 1.8V 1.8V	0V 0V 0V	0.05 0.05 0.05
0.22 um 0.24 um 0.3 um 0.5 um	1.8V 1.8V 1.8V 1.8V	1.8V 1.8V 1.8V 1.8V	0V 0V 0V 0V	0.05 0.05 0.05 0.05
0.22 um 0.24 um 0.3 um 0.5 um 0.7 um	1.8V 1.8V 1.8V 1.8V 1.8V	1.8V 1.8V 1.8V 1.8V 1.8V 1.8V	0V 0V 0V 0V 0V	0.05 0.05 0.05 0.05 0.05
0.22um 0.24um 0.3um 0.5um 0.5um 0.7um 1um	1.8V 1.8V 1.8V 1.8V 1.8V 1.8V 1.8V	1.8V 1.8V 1.8V 1.8V 1.8V 1.8V 1.8V	0V 0V 0V 0V 0V 0V 0V	0.05 0.05 0.05 0.05 0.05 0.05

Figure 5. IMV tree

. Click this IMV item. The multi-die plot will appear as shown in Figure 6.

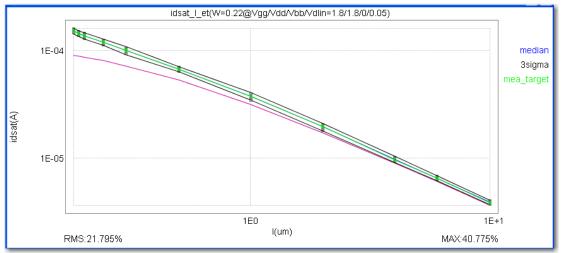


Figure 6. Multi-die plot

## **Customization**

The user can also modify the source script to hide/show the mean (or median) value of the multi-die data. Let's use the above "ldsat\_l\_et" plot as an example. Choose *Script -> Script Project* from the main menu to pop up the MBP Script window. In the "*Project*" tab, click *default -> imv -> imv -> idsat ->àidsat\_l\_et*. Double click the "idsat\_l\_et" item to display the code window (Figure 7).

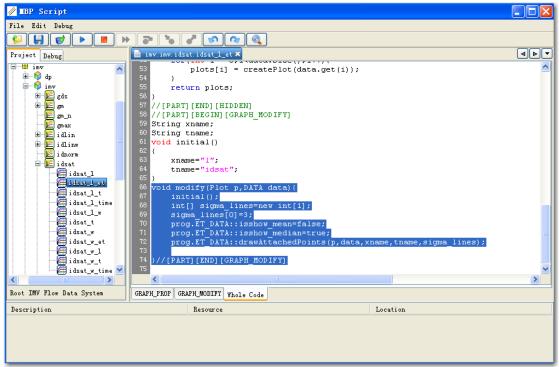


Figure 7. Script for the Plot

In the script, there are variables to show/hide the mean and median value: "isshow\_mean" and "isshow\_median." Set it to "true" (or "false") to show (or hide) the curve.