TECHNOTE **MG73318**, 15 Dec 2006

Parasitic Extraction User Defined Corners

SYMPTOMS	TECHNOTE ID
Process Variation	MG73318
	TECHNOTE TYPE
	How-To
	UPDATED
	15 Dec 2006
	PRODUCTS
	Calibre xRC
	ENVIRONMENT
	Calibre xRC

Solution

Process corners refers to the variations on a "typical" process; for instance, metal thickness may not be exactly controlled.

As of version 2006.4, you can use Calibre xRC to extract multiple process corners in one run.

Prerequisites:

- A calibrated rule file containing capacitance and resistance rules that were created by xCalibrate version 2006.4_11 or later
- For user-defined process corners, Calibre xRC v2006.4_23 or later
- The SVRF file must contain the PEX Corner statement and capacitance and resistance calculations that call corner_index().

To create and extract user-defined process corners:

1. Add a PEX Corner Custom statement to your SVRF file. For a description of this statement see the Addendum to the

SVRF available at http://www.mentor.com/dsm/customer/documentation/ under 2006.4_23.

2. Run extraction (-pdb). All foundry-defined and user-defined corners are extracted. Note: the addendum is incorrect where it states you can use the -corner switch on this step.

3. Run the formatter (-fmt). If you do not specify particular corners, the typical corner is netlisted. To specify particular corners, use the -corner switch, for example:

```
calibre -xrc -fmt -corner typical,rc_best -all rules
```

(There should be no spaces around the comma separating two corners.) Corner netlists are named in the form <*filename*>_<*corner*>, where <*filename*> is specified in the appropriate PEX Netlist statement. Use "-corner all" to netlist all corners. (The addendum is incorrect in stating that if no -corner switch is present all corners are netlisted.)