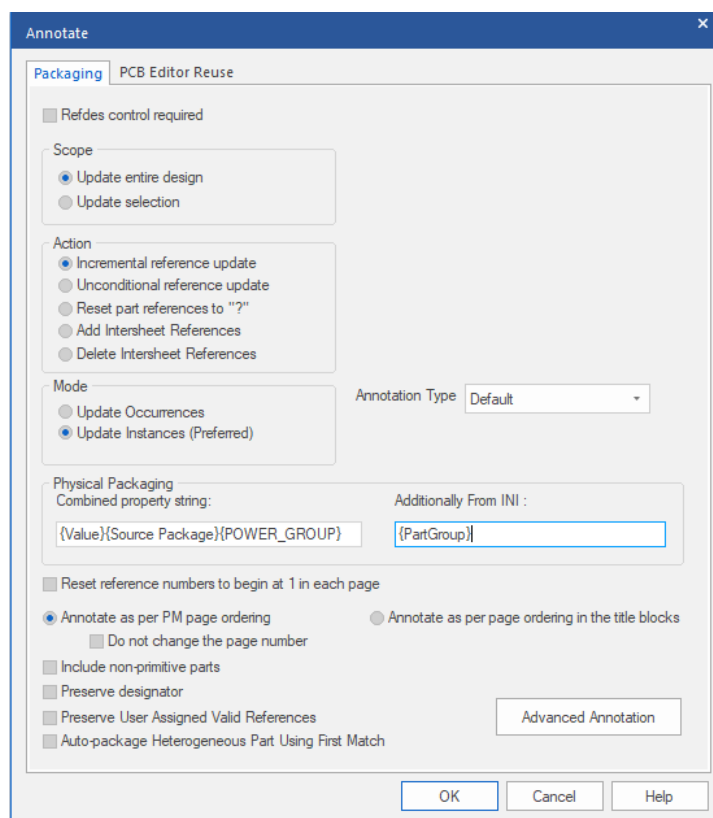# Introduction

When using multi section parts users want the ability to control the annotation. By default Capture will annotate based on the symbol location in the page, left to right and top to bottom, but if you have multiple instances of the same symbol (gates, fpga's etc) you want to be able to add some control to ensure that the Annotation tool follows your design intent. There are three methods to assist users in this type of annotation control.

Annotating Multi Section Parts.

Add a unique grouped property to each part. This can either be done at the library level (recommended) or on a schematic by schematic basis.

1. Open or create a new part.
2. For each part in the package, create a new property called "PartGroup" to uniquely identify packages.
3. Save the part.
4. Place the parts on the schematic page. You can set the Part designator A, B, C (or 1, 2, 3) as you place the parts or use the property editor to change to the required part designator.
5. For each complete package, choose a group identifier and enter that value in the PartGroup property. For example, if you're heterogeneous package contains three parts and you have placed six instances (two of each part in the package), you might use a value of "Red" for the first three part instances and a value of "Blue" for the second three part instances. You can also use numbers as the unique identifier.
6. Save the design, and choose Tools - Annotate.
7. In the Annotate dialog box, modify the Physical Packaging Combined property string to include {PartGroup}, or set the "Additionally from INI" box to {PartGroup} to always use this property

8. Choose OK. Annotate will correctly update part references for all parts (heterogeneous and homogeneous), giving one reference to all parts sharing the same value for Group. For example, the three parts with a value of Red for Group would be referenced as U1A, U1B, and U1C, while the three parts with a value of Blue for Group would be referenced as U2A, U2B, and U2C.

There is also an option when annotating heterogeneous packages to use the first match.
1. Tools - Annotate
2. Select Radio Button "Auto=package Heterogeneous Part Using First Match"
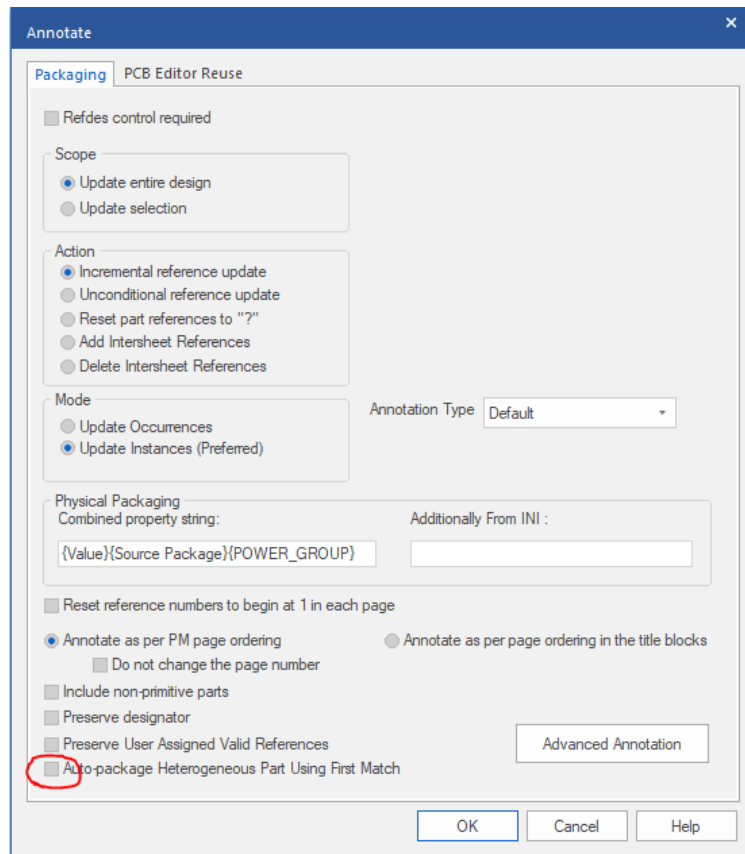
3. Now choose unconditional/incremental annotation as per requirement.
4. OK To Annotate.

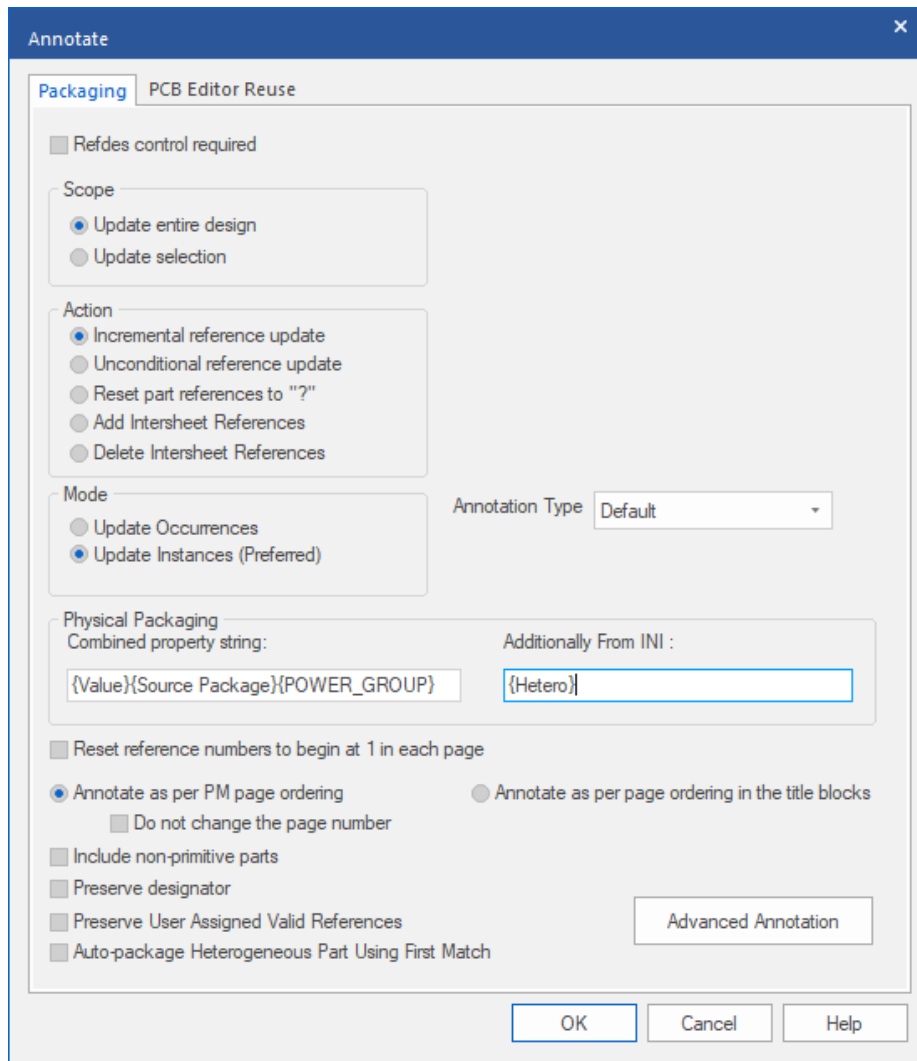   # Unconditional annotation will change refdes of all the parts
   # If you wish not to change any of the existing assigned refdes, use incremental annotation.

There is also a TCL script available called capCBWareAddHeteroProp.tcl (available on request) that once installed, gives users the ability to automatically add a "Hetero" property to the selected parts. This works similar to the PartGroup option described above but the addition of the property is automated.

1. Select the parts you wish to add the property to using LMB (left mouse button) and CTRL+LMB.
2. RMB (right mouse button) More – Add Heterogeneous Property.
3. A GUI will appear with the next sequential number available.
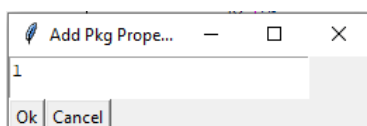
4. In the Annotate dialog box, modify the Physical Packaging Combined Property String, or the Additionally from INI", to include {Hetero}.
5. Annotate the design.