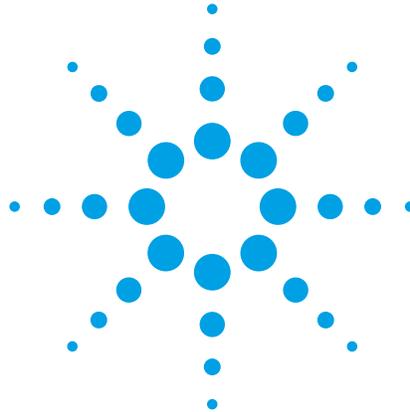


# Time Saving Instructions for Comparing CAD and the BOM for Utilization on your 5DX Automated X-ray Inspection System

Application Note



## Introduction

Microsoft® Excel serves as a great tool for quickly and easily comparing the CAD and BOM enabling the user to easily and rapidly deal with no load components. The series of Figures and instructions within this document will give users a step by step process to implement.

## Instructions

The first step is to open Microsoft Excel and import the BOM, Figure 1. As shown in Figure 1, the components should only be in one column.

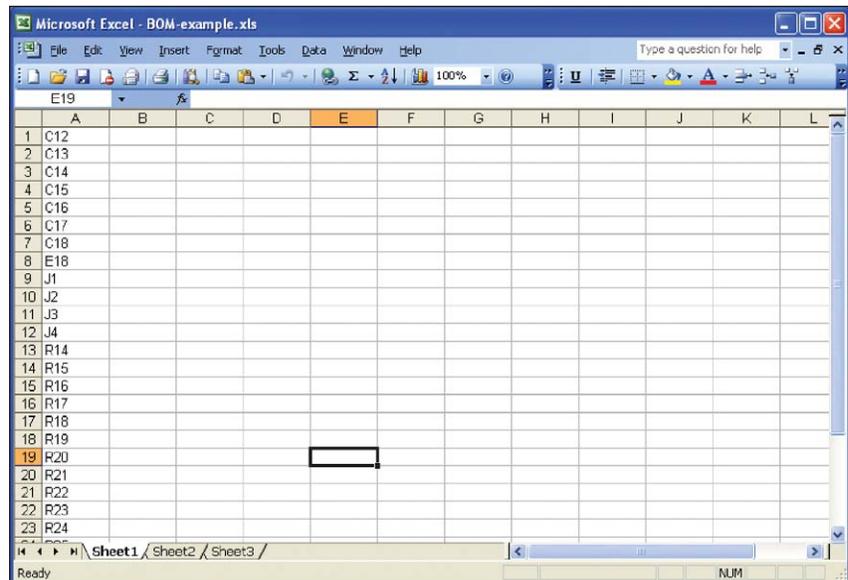


Figure 1. Import the BOM



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The next step will be to import the component.NDF into Excel. The NDF can be exported from CAMCAD. To open the NDF file, in Excel, select "File: Open," select "componen.ndf" as shown in Figure 2.

In the "Text Import Wizard". Choose data type of "Delimited," as shown in Figure 3.

Select "Tab" and "Space," then "Finish," as shown in Figure 4.

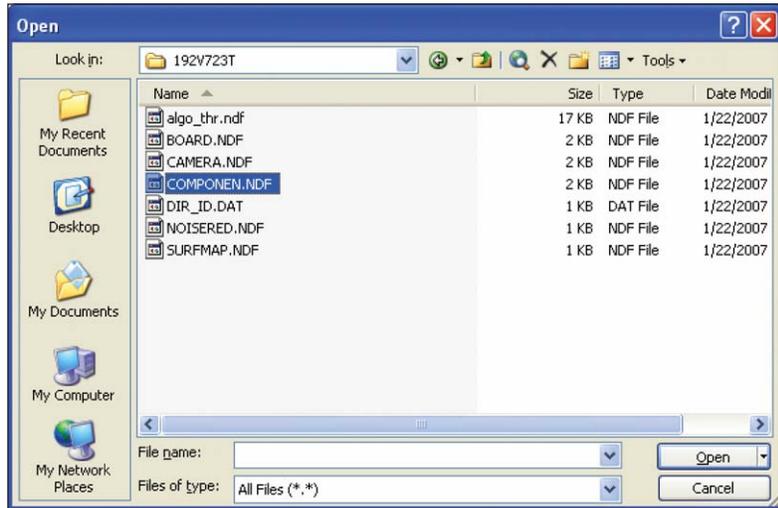


Figure 2. Select source file componen.ndf

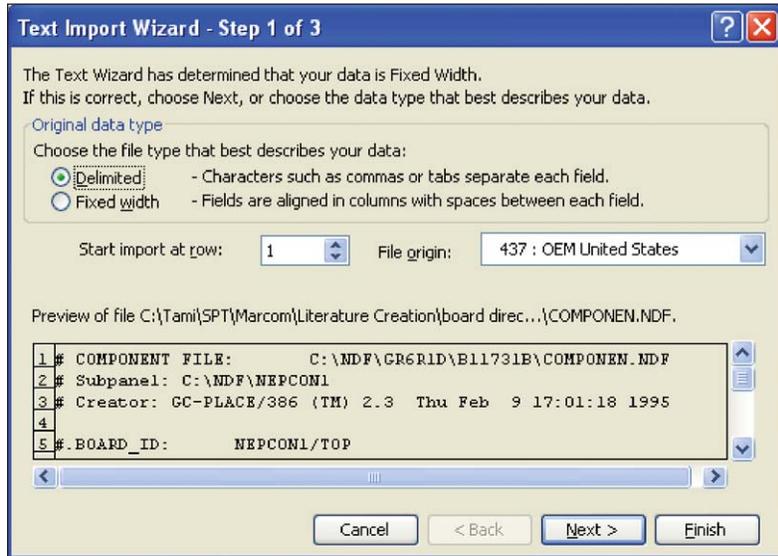


Figure 3. Select "Delimited" data type, then "Next>"

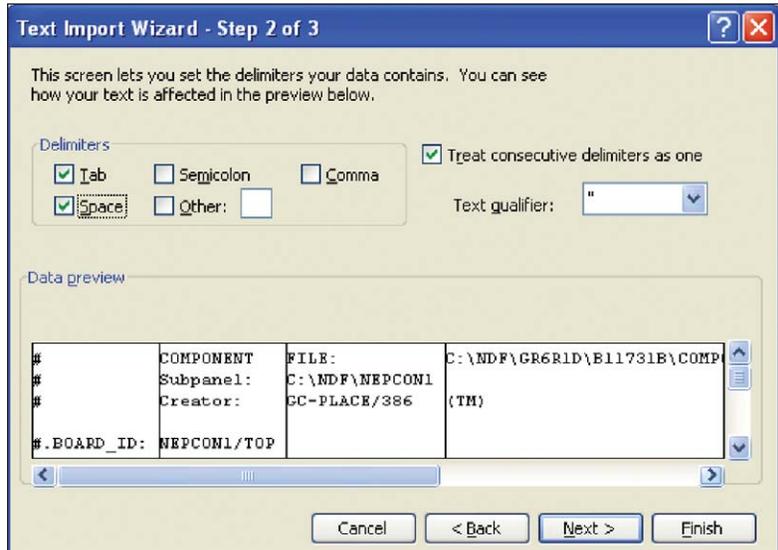


Figure 4. Select Tab and Space, then click Finish

Next, select all components and attributes columns, as show in Figure 5, so that the cells can be copied.

Paste twice into the BOM sheet (Figure 1) leaving two blank columns in between, shown as columns B & C and I & J in Figure 6.

Select the first component column (column D) and replace @ with blank ("Edit," "Replace...") as shown in Figure 7.

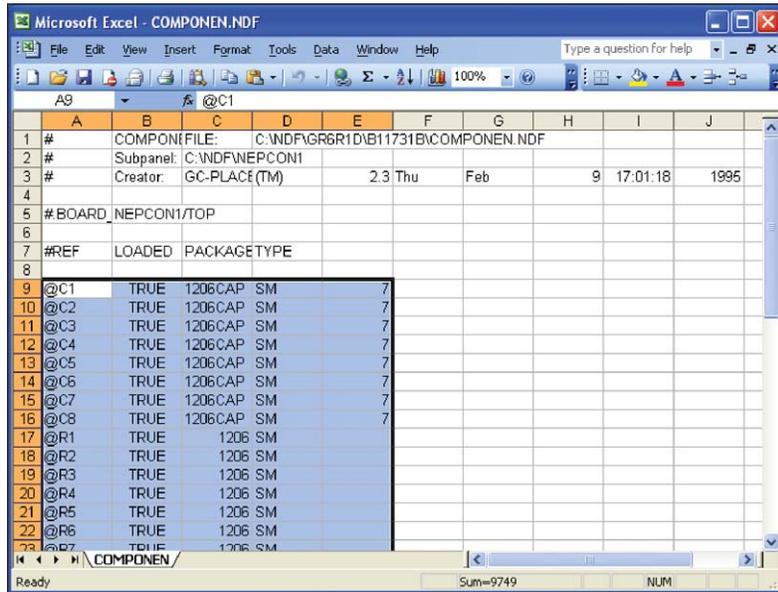


Figure 5. Copy cells

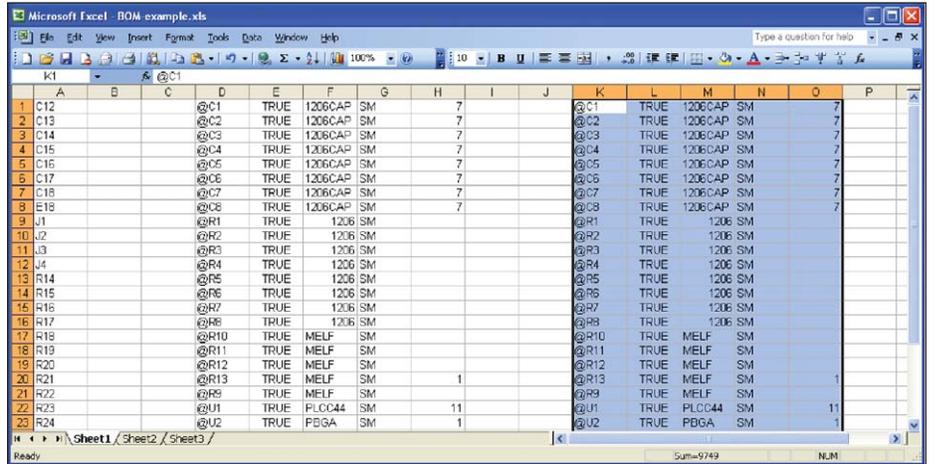


Figure 6. Paste to BOM Sheet

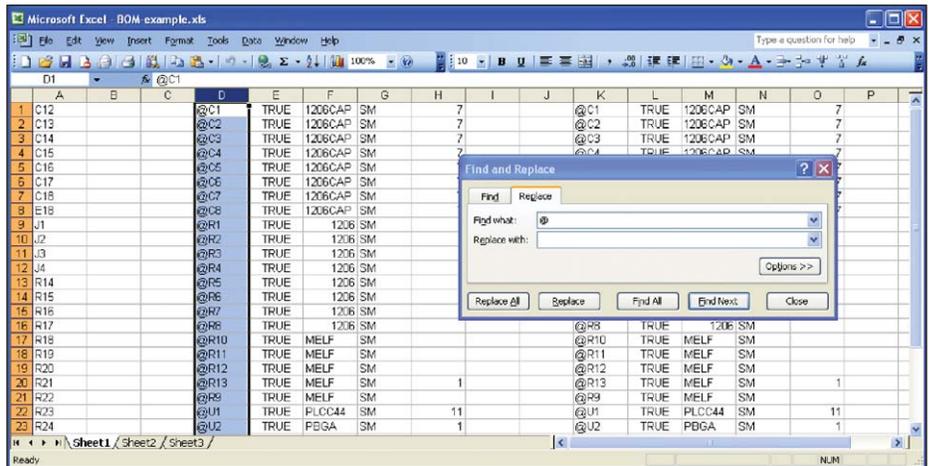


Figure 7. Remove the @ symbols from the pasted data

Similarly, replace all the \_1, \_2, etc. with a blank as shown in Figure 8. This will be relevant if the program being worked on is tuned since sub-types will exist and utilize numbers.

At cell I1, input the function '=vlookup(D:D,A:A,1,0),' then press Enter.

Copy this function to the entire column, the results are as shown in Figure 10.

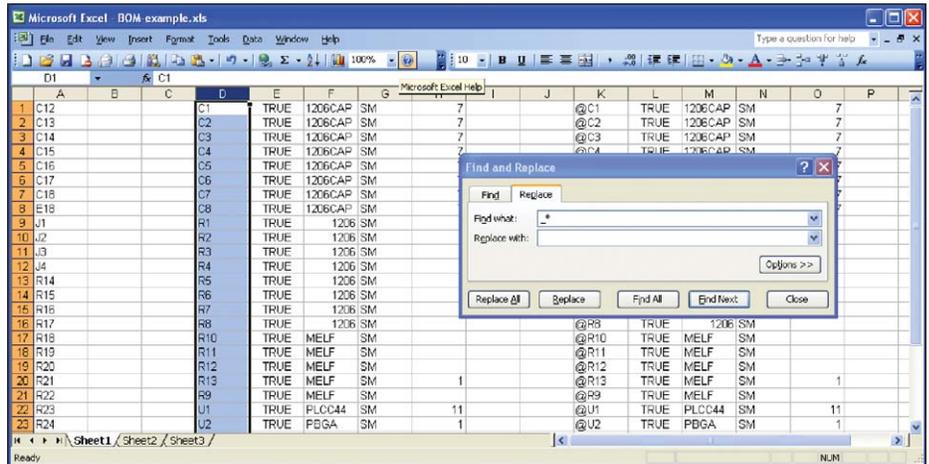


Figure 8. Remove the \_1, \_2, etc. from the pasted data

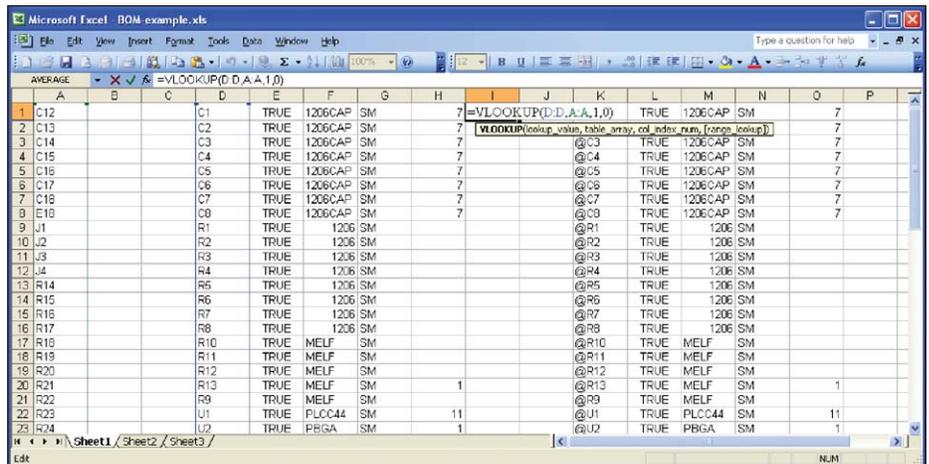


Figure 9. Use vlookup function

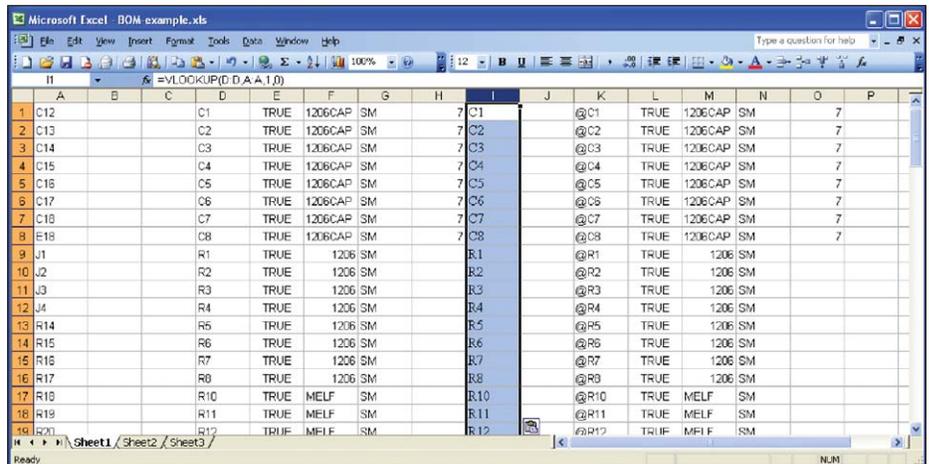


Figure 10. Apply function to all of column I

Copy column I, click on column J, select "Edit" and "paste special...", "Value," then click the OK button, as shown in Figure 11.

Column I can be deleted, or just ignored, see Figure 12.

Sort column J, as shown in Figure 13, select "Data," "Sort...", "Expand the Selection."

Next, modify column L as required. If the content of J column is #N/A, then at the same row, modify the content of L from TRUE to FALSE. Copy cells (from K to O columns), as show in Figure 14.

Paste the cells to the component.ndf file and save. Open Testlink, import the NDF files and set all no test to no load.

Some other areas where this information may be helpful are:

- If some components have been changed position, you also can use vlookup function to compare and modify.
- If some components are in the BOM, but not in the NDFs (old program, all no load components missing), you can use the function as '=Vlookup(BOM column:NDF column,1,0).'



Figure 11. Copy and paste value into column J

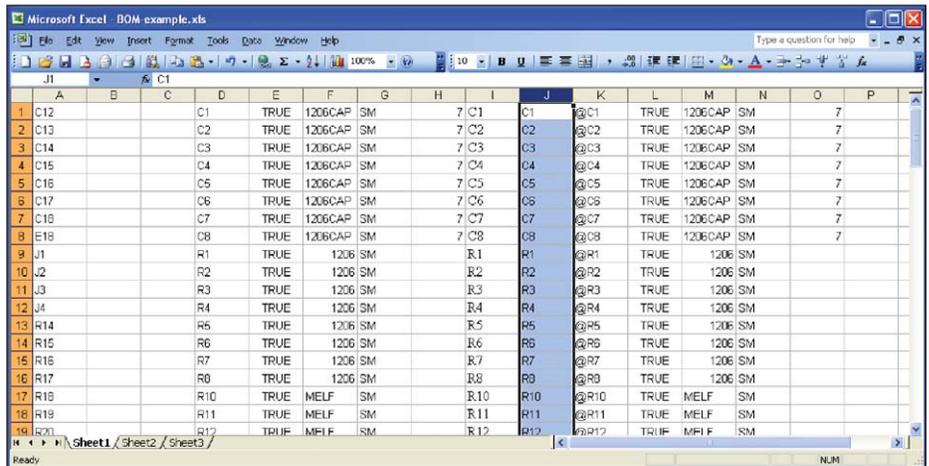


Figure 12. Columns I and J populated



Figure 13. Sorted data

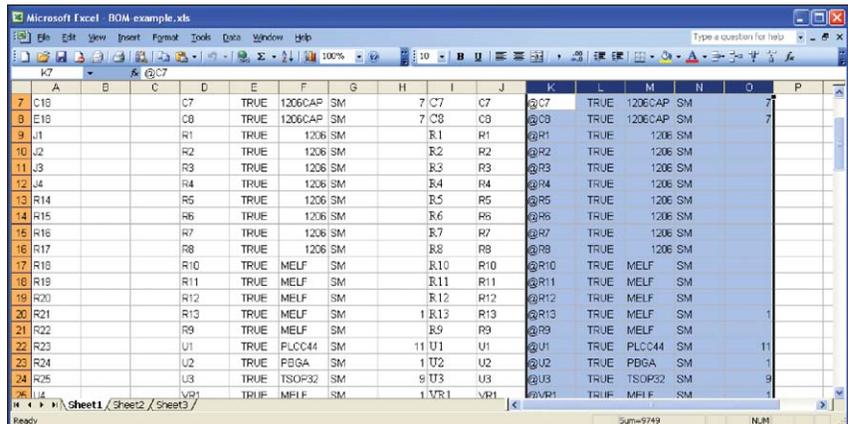


Figure 14. Copy cells from column K to O



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Revised: October 24, 2007

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Printed in USA, January 4, 2008

5989-7674EN



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