User Guide 2

Create Parts & Documents

This page left blank intentionally

Table of Contents

Create a Parts & Documents

OBJECTIVES

Upon completion of this topic, you will be able to:

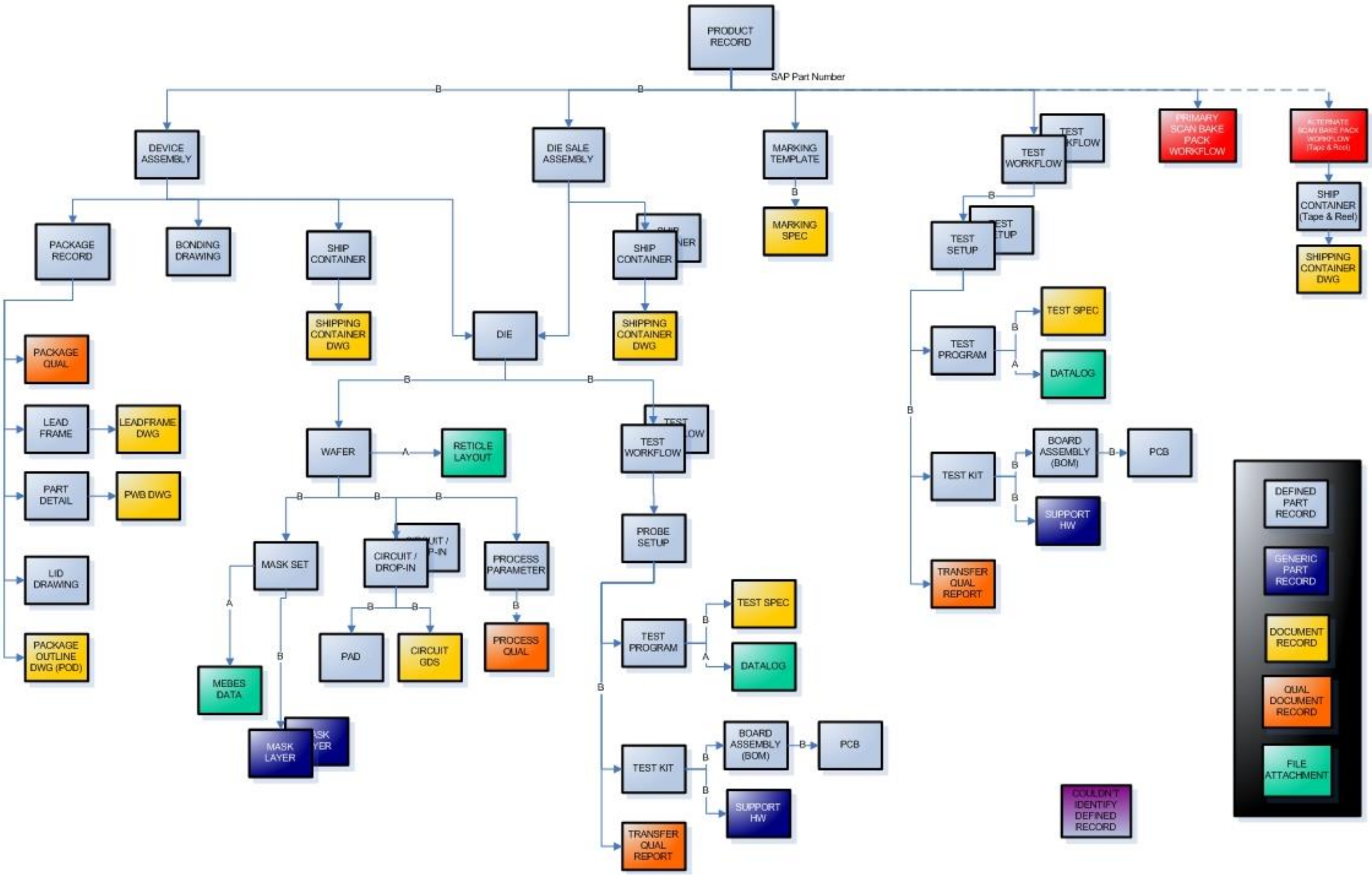
- Define a Bill of Materials
- Create a part item
- Identify the contents of an item
- Add an item to an item's BOM
- Create a document item
- Attach a file
- View an attached file

Introduction

A product record needs to be established in PLM before a history can begin to be compiled. Once a record is established, all related product parts, documents, actions, and events can be tracked, managed, and shared.

2.1 – Bill of Materials Structure

The bill of materials is the structure that guides the creation of parts and documents in PLM.



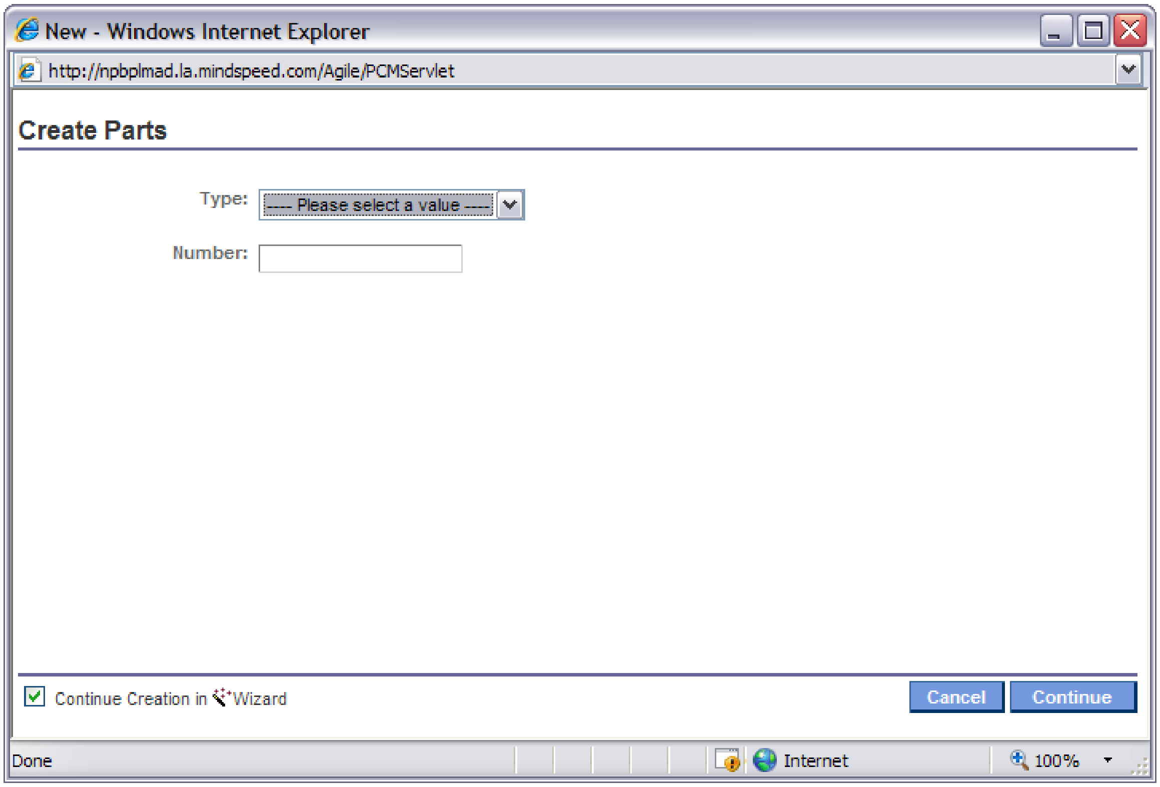
2.2 – Create a Product Record

The first step in creating a bill of materials for a product is to create the product record. The product record represents the entire product and it is the part to which all supporting parts and documents for the product will be associated.

1. **Click the Create button**

2. **Select Items, Parts**

   The Create Parts window opens.



Note: Confirm that the Continue Creation in Wizard check box is selected.

3. **From the Type field, select Product Record**

4. **In the Number field, enter the part number according to the naming conventions**

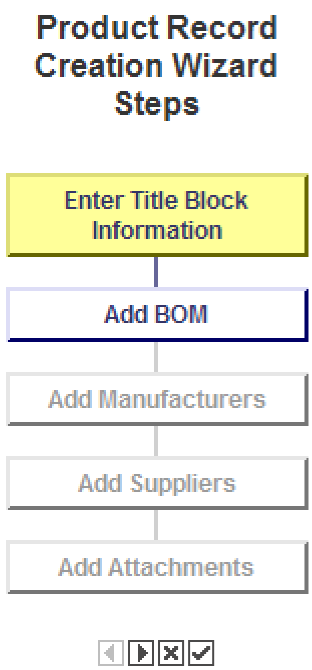
5. **In the Title field, enter a title according to the naming conventions**

Note: The title can be changed.

2.2 – Create a Product Record

6. Click Continue

The Product Creation Wizard opens. The product record is composed of The Title Block, Page Two, and Page Three. On the left side of the page are the steps that you will take in creating a product record.



2.2 – Create a Product Record

Field labels that are bold indicate that the field is required. Information can be entered in any order. At the top of the Title Block is the part number you assigned, the type, the phase, and the title. The initial phase of a part is Preliminary. Parts and documents can be in one of six phases.

Phase	**Definition**
Preliminary	Initial stage. The item has not been released.
Prototype	Released to be built in limited quantities for testing.
Pilot	Released to be built in limited initial quantities.
Production	Released for regular production
Inactive	Temporarily not available but may be reactivated.
Obsolete	No longer in use.

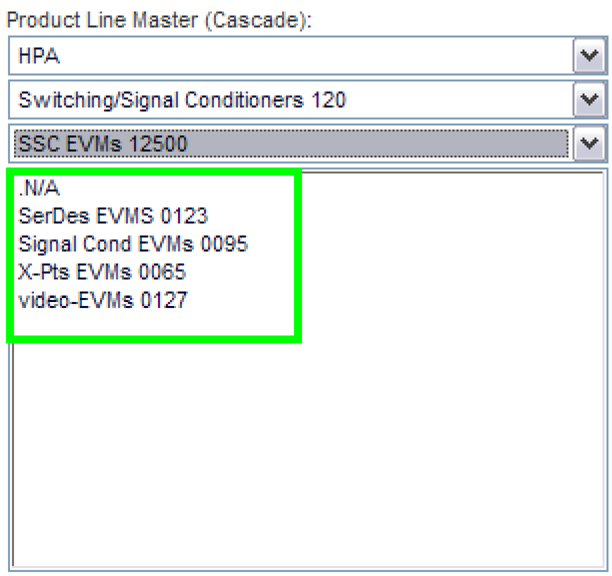
7. **Click the browse button beside the Product Line field**

   The product line window opens.

8. **From the first Product Line Master (Cascade) field, select a business unit**

9. **If necessary, from the remaining Product Line Master (Cascade) fields, select a product line**

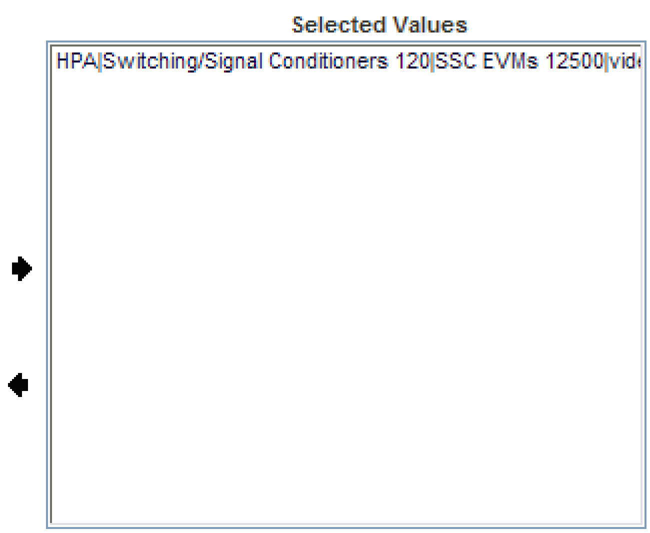
   The available product line(s) appear in the list field.



10. **From the list field, select a product line**

11. **Click the right pointing arrow to the left of the Selected Values field**

    The product line is added to the Selected Values list. By selecting values from each of the Product Line Master (Cascade) fields, you composed the product hierarchy for the part. At then end of the product hierarchy in the Selected Values field, the product hierarchy number is appended.



2.2 – Create a Product Record

12. **Click OK**

    You return to the Product Record part page. The Date Effective, Date Released, and Date Incorporated will be automatically recorded when those events occur.

13. **If necessary, scroll to Page Two**

    On page two, You can add any miscellaneous notes, and control who has access to it internally and externally.

14. **If necessary, scroll to Page Three**

    On Page Three, you can define the product type, the operating temperature, the test planning yield, and up to ten markings.

15. **Click Next**

    The Add BOM page appears. From here you can add supporting parts and documents for the product.

    > *Note: You can click the Back button to return to the previous step.*

16. **Click the arrow beside the Add button**

    You can create new items, search for an existing item, or enter the item numbers that you know.

17. **Click Next**

    The Add Manufacturers page appears.

18. **Click the arrow beside the Add button**

    You can create a new manufacturer or search for an existing one.

19. **Click Next**

    The Add Suppliers page appears. You use the Add button to add suppliers to the product record.

20. **Click Next**

    The Add attachments page appears. You can add any relevant product attachments.

2.2 – Create a Product Record

21. Click the arrow beside the Add button

You can attach files located outside of the PLM system, Internet URLs, and you can search for records within PLM to attach.

22. Click Finish

The Product Record part is created and its record page is opened.

2.3 – Explore a Part Record

A part record is the primary repository for all information related to the product. Any action, event, or resource regarding the part will be initiated and tracked from the part record.

1. **From the Recently Visited navigation panel, click the Product Record you created**

> *Note: If the product record created in the last exercise was the last item you visited in PLM, a link to that record will be listed at the top of the Recently Visited navigation panel. If you have visited items more recently than the product record, it may be further down in the Recently Visited list.*

The product record page is opened. The product record is a part record. All parts pages will be composed of the same buttons and tabs. When you open a part it always opens to the latest revision. You know what revision the part is on using the Rev field. You can change which revision you are viewing by selecting one from the Rev field.

> *Note: Your system privileges determine which revisions you can view.*

2. **If necessary, click the Title Block tab**

The Title Block tab displays the information that you defined when you initially created the part. It is composed of the Title Block, Page Two and Page Three.

3. **Click Edit**

The Title Block tab is now in editing mode. You can make changes to those fields that are enabled.

2.3 – Explore a Part Record

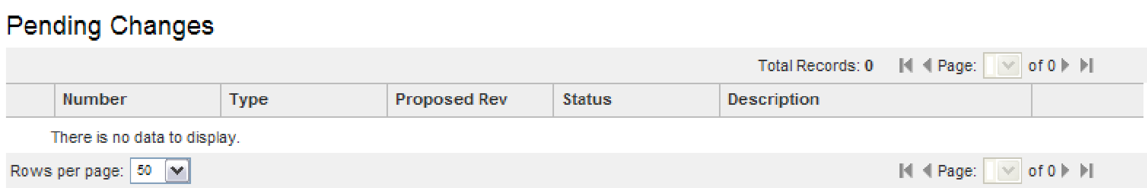
4. Click Save

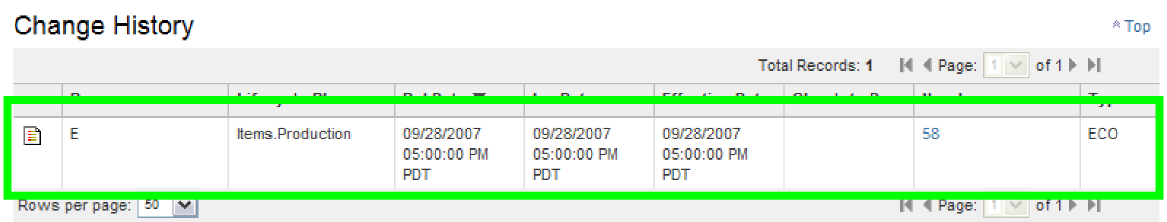
Any changes you made to the Title Block are saved.

> *Note: If you made changes to the Title Block and then decided to discard those changes, you click Cancel.*

5. Click the Changes tab

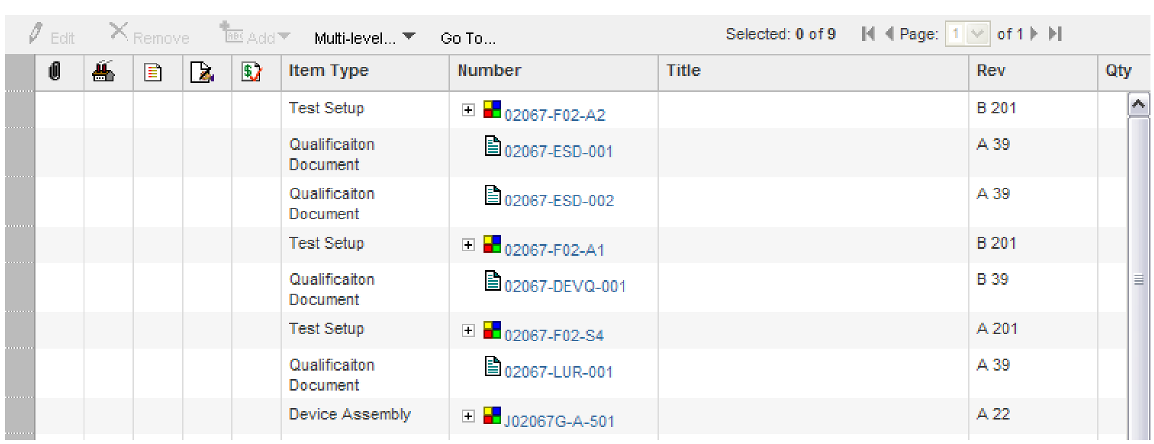
The Changes tab lists any pending changes, released changes, and canceled changes. You view a change request by clicking on its number in the number column.





6. Click the BOM tab

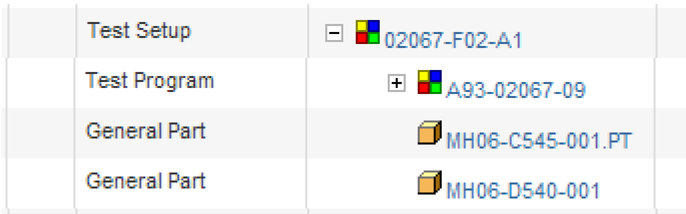
The BOM tab lists all the components (parts and documents) and subassemblies on an item's bill of materials. You can open any item by clicking its number. If an item has a plus symbol beside it, that indicates that there are multiple items that compose that item.



2.3 – Explore a Part Record

7. **In the number column, click the plus symbol beside an item**

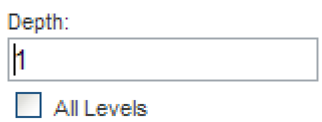
   The item is expanded to reveal the items that compose it.



8. **Click the Multi-level button**

9. **Select Expand**

   The BOM Depth page appears. You can define how many levels you want to expand the BOM. The default is one level. You can also select the All Levels box to show all levels of the BOM.

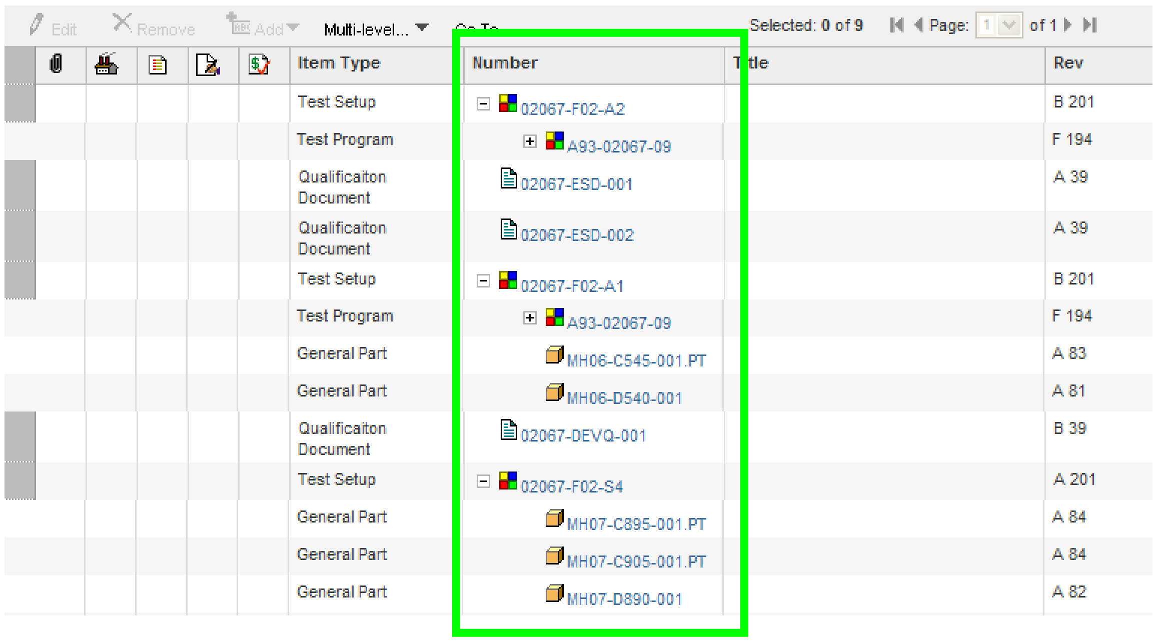


10. **In the Depth field, enter a level depth number**

2.3 – Explore a Part Record

11. Click OK

All of the items listed are expanded up to the number of levels you defined.



12. Click Multi-level, Collapse

All the levels are collapse and only the top level is now visible in the Number column.

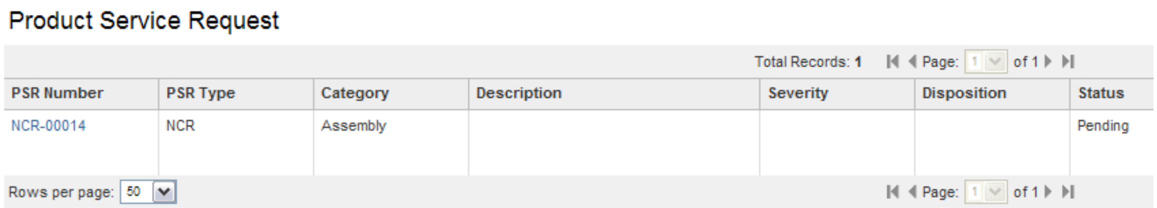
13. Click the Manufacturers tab

The Manufacturer's tab lists the manufacturer part used for an item.

2.3 – Explore a Part Record

14. Click the Quality tab

The Quality tab lists the non-conformance reports and problem reports for this item. This tab will be automatically populated when associated product service requests are created. You can open a product service request by clicking its number in the PSR Number or QCR Number column.



Product Service Request

Total Records: 1 Page: 1 of 1

PSR Number	PSR Type	Category	Description	Severity	Disposition	Status
NCR-00014	NCR	Assembly				Pending

Rows per page: 50 Page: 1 of 1

Quality Change Request

Total Records: 0 Page: of 0

QCR Number	QCR Type	Category	Description	Reason	Customer

There is no data to display.

Rows per page: 50 Page: of 0

15. Click the Suppliers tab

The Suppliers tab lists all the suppliers associated with the item.

16. Click the Relationship tab

The Relationships tab lists the other objects to which the item is linked. The Relationships tab also allows you to create a link between the item and other changes, customers, discussions, file folders, and items. There are two types of relationships.

Type	**Purpose**
With Rules	The item moves another object forward in its workflow.
Without Rules	The item is linked to another object for reference.

Note: In order for relationships to be created, the objects you are relating must be in any workflow step other than unassigned, released, or completed.

2.3 – Explore a Part Record

17. Click the Where Used tab

The Where Used tab lists all the assemblies that use this item. When the item is added to the BOM of an assembly, a record will automatically be added to its Where Used tab. You can navigate directly to the associated item by clicking on its number in the Item Number column.

18. Click the Attachments tab

The Attachments tab lists all the files and URLs that are associated with the item. To open an attachment, click its file name in the Filename column. The attachment will open in its native application.

19. Click the History tab

The History tab is automatically populated with the actions related to the item in chronological order.

20. Click the Show BOM Tree button

The BOM tree appears in the left navigation panel. This is the same tree that appears in the Number column on the BOM tab. You can expand, collapse, and navigate to any item in the BOM tree by clicking on its number.

2.3 – Explore a Part Record

21. Click the Actions button

The Actions menu appears. You have several actions you can take on an item.

Action	Function
Bookmark	Saves a bookmark to the item in your bookmark folder in the navigation pane.
Subscribe	Receive notifications relating to the object.
Save As	Use this object as the starting point for a similar object with a different name.
Copy URL to Clipboard	Copies the address of the current page to the clipboard. You can then paste the URL where you need it.
Export	Copy the object's data out of PLM.
Microsoft Excel	Export the object's data to and Excel worksheet.
Print	Print the object
Send	Email the object link to another PLM user.
Incorporate/Unincorporate	Lock and unlock the object's attachments for editing.
Create Change	Start a change request relating to the object.

2.3 – Add an Item to a Product Record

Once a product record is established, you can begin adding items to the record according to the Mindspeed BOM structure.

> *Note: Items can only be added to the BOM when the item is in the Preliminary lifecycle phase. If the item is passed the Preliminary phase, items can only be added to the BOM using Engineering Change Orders (ECOs).*

1. **Open a product record in the Preliminary phase**

2. **Click the BOM tab**

   The BOM tab lists the items that compose the item's BOM. Each icon beside the records listed on the BOM indicates the type of item.

Icon	Identifies
	A bill of materials (BOM)
	A physical part
	A document

2.3 – Add an Item to a Product Record

The fields on the BOM tab provide specific information regarding the items on the BOM.

Field	**Purpose**
Item Type	A description of the item.
Number	The unique identifying number for the item.
Title	The unique name given to the type of item.
Rev	The revision number of the item.
Qty	Indicates the number of the item used in the assembly.
Find Num	Indicates the order of the item in the BOM.
Reference Designators	The locator for a component on a printed circuit board.
BOM Notes	Information regarding the item.
Test Flow Type	Indicates the test workflow for the item.

3. **Position the pointer over the arrow to the right of the Add button**

   You can create a new item to add, search for an item, enter known item numbers, or add a blank row as a placeholder.

4. **Click Type-in Known Number(s)**

   The Add Items page appears.

2.3 – Add an Item to a Product Record

5. **In the Item Number(s) field, enter an item number you want to add to the BOM**

   Note: If you are adding more than one item, list the item numbers one per row.

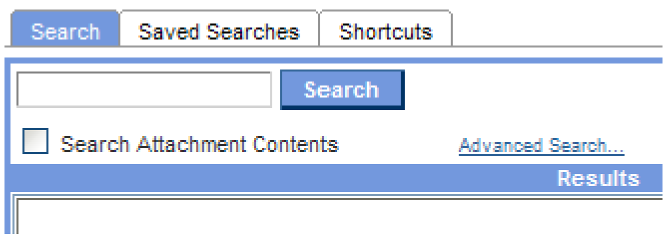
6. **Click Add**

   The item is added to the BOM.

7. **Click the arrow beside the Add button**

8. **Select Search**

   The Add BOM Items page appears. You can enter characters directly in the search field by which to search, use a saved search, or access your shortcuts. You have the option to search the content in attachments, and to use advanced search.



When searching, you can use the following wildcards.

Wildcard	Returns
* (asterisk)	Any and all characters preceding or following the characters it is between.
? (question mark)	Any single character preceding or following the characters it is between.
\ (backslash)	A name or number that contains an asterisk (*), question mark (?), or a backslash (\).

9. **In the search field, enter any part of an item number preceded by or followed by an asterisk**

2.3 – Add an Item to a Product Record

10. **Click Search**

    The results are listed in the Results field.

11. **Select the item you want to add**

12. **Click the right pointing arrow between the Results and Selected fields**

    The item is added to the selected field.

    > *Note: You can add as many items as you want to the Selected field.*

13. **Click OK**

    The Edit Newly Added Rows page appears. You can cancel adding this item and change the item being added using the browse button in the Number column.

14. **Click Save**

    The item is added to the BOM.

2.4 – Create a Document

All products will have supporting documentation that is created during the product lifecycle. These documents can be qualification reports, test specifications, and the like.

1. **Open a product record in the Preliminary phase**
2. **Click the BOM tab**
3. **Click Add**

   The New page appears.

   > *Note: You can also create a document from the Create, Items menu.*

4. **Click the arrow beside the Type field**

   You can create a General Document, a Product Quality Record document, or a Qualification document.

5. **Select the type of document you want to create**

   The Number, Description, and Category fields appear.

6. **In the Number field, enter the documents' number**

   > *Note: When numbering a General Document, click the 123 button beside the Number field to automatically generate a number.*

7. **In the Description field, enter a description according to the naming conventions**
8. **Click the browse button beside the Category field**

   The Lists page appears.

9. **Click the arrow beside the first Category Documents Cascade field**
10. **Select the type of document**
11. **Click the arrow beside the second Category Documents Cascade field**
12. **Select a type of document to create**
13. **Click OK**

    You return to the New page.

14. **Click OK**

2.4 – Create a Document

The document is added to the BOM.

15. Click the document's number

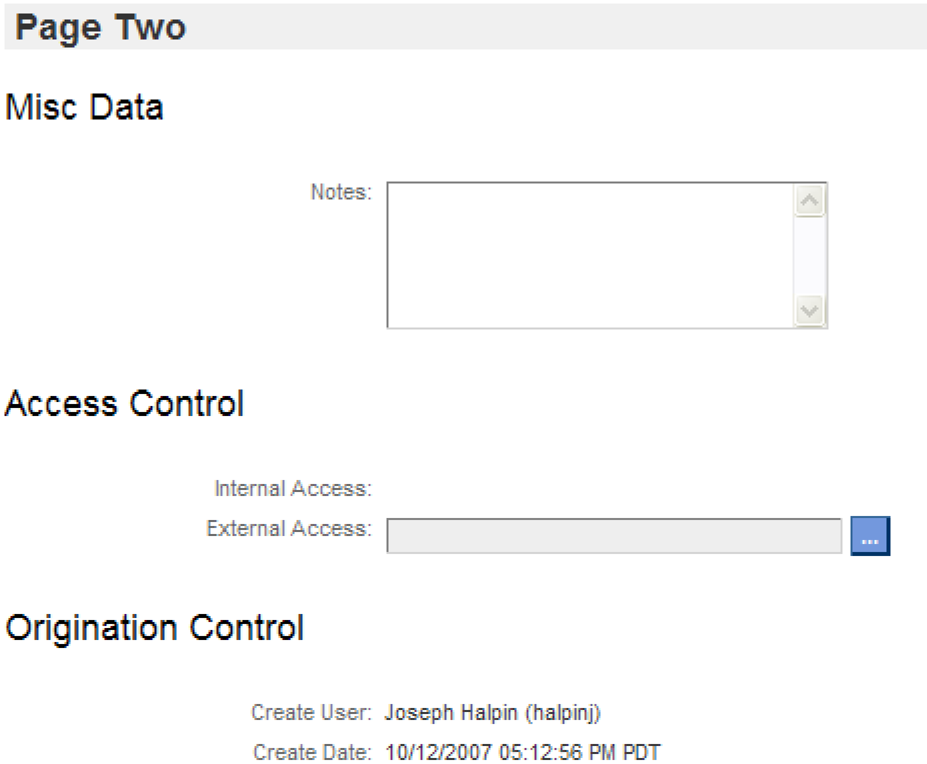
The document opens. The first tab contains the Title Block information, any miscellaneous data, and access control.

The Title Block section indicates the document title, product line, and category. The title and category are the only required fields.

Number:	C06SPDM-PROQ-001
Document Type:	Qualification Document
Lifecycle Phase:	Production
Title:	MC2006_ASAT_SOIC_TSMC_Fab2A_C06S_Qual
Product Line:	
Category:	Qualification Documents|Process Qual
Date Effective:	12/19/2007 04:00:00 PM PST
Date Released:	12/19/2007 04:00:00 PM PST
Date Incorporated:	12/19/2007 04:00:00 PM PST

2.4 – Create a Document

The Page Two section allows you to add any notes regarding the document, and specify who can access the document external to Mindspeed.



Page Two

Misc Data

Notes:

Access Control

Internal Access:

External Access:

Origination Control

Create User: Joseph Halpin (halpinj)

Create Date: 10/12/2007 05:12:56 PM PDT

Depending on the document type, it may have a Page Three section. For example, Qualification documents will have a Qualification Data section.

2.4 – Create a Document

16. Click the Changes tab

The Changes tab lists any pending changes, released changes, and canceled changes. You view a change request by clicking on its number in the number column.

Pending Changes

	Number	Type	Proposed Rev	Status	Description
	There is no data to display.				

Rows per page: 50

Change History

	Rev	Lifecycle Phase	Rel Date	Inc Date	Effective Date	Obsolete Da...	Number
	A	Items.Production	12/19/2007 04:00:00 PM PST	12/19/2007 04:00:00 PM PST	12/19/2007 04:00:00 PM PST		ECO-236

Rows per page: 50

17. Click the BOM tab

The BOM tab lists all the components (parts and documents) and subassemblies on an item's bill of materials. You can open any item by clicking its number. If an item has a plus symbol beside it that indicates that there are multiple items that compose that item.

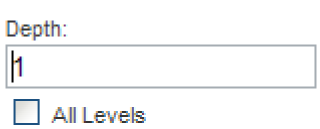
18. In the number column, click the plus symbol beside an item

The item is expanded to reveal the items that compose it.

19. Click the Multi-level button

20. Select Expand

The BOM Depth page appears. You can define how many levels you want to expand the BOM. The default is one level. You can also select the All Levels box to show all levels of the BOM.



21. In the Depth field, enter a level depth number

2.4 – Create a Document

22. **Click OK**

    All of the items listed are expanded up to the number of levels you defined.

23. **Click Multi-level, Collapse**

    All the levels are collapse and only the top level is now visible in the Number column.

24. **Click OK**

    All of the items listed are expanded up to the number of levels you defined.

25. **Click Multi-level, Collapse**

    All the levels are collapse and only the top level is now visible in the Number column.

26. **Click the Quality tab**

    The Quality tab lists the non-conformance reports and problem reports for this item. This tab will be automatically populated when associated product service requests are created. You can open a product service request by clicking its number in the PSR Number or QCR Number column.

27. **Click the Relationship tab**

    The Relationships tab lists any records that are linked to the current record. You can link records for any reason. For example, as a reference or to automate workflow.

28. **Click the Where Used tab**

    The Where Used tab lists all the assemblies that use this item. When the item is added to the BOM of an assembly, a record will automatically be added to its Where Used tab. You can navigate directly to the associated item by clicking on its number in the Item Number column.

29. **Click the Attachments tab**

    The Attachments tab lists all the files an URLs that are associated with the item. To open an attachment, click its file name in the Filename column. The attachment will open in its native application.

30. **Click the History tab**

    The History tab is automatically populated with the actions related to the item in chronological order.

2.4 – Create a Document

31. Click the Actions button

The Actions menu appears. You have several actions you can take on an item.

Action	Function
Bookmark	Saves a bookmark to the item in your bookmark folder in the navigation pane.
Subscribe	Receive notifications relating to the object.
Save As	Use this object as the starting point for a similar object with a different name.
Copy URL to Clipboard	Copies the address of the current page to the clipboard. You can then paste the URL where you need it.
Export	Copy the object's data out of PLM.
Microsoft Excel	Export the object's data to and Excel worksheet.
Print	Print the object
Send	Email the object link to another PLM user.
Incorporate/Unincorporate	Lock and unlock the object's attachments for editing.
Create Change	Start a change request relating to the object.

2.5 – Add an Attachment

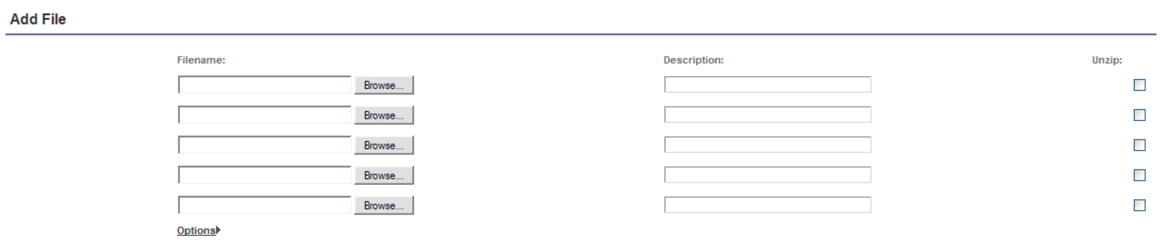
There may be external resources that support PLM items that you create. When you have supporting resources and you need to associate them with an item, you can attach the resource.

1. **Open an item**

2. **Click the Attachments tab**

3. **On the Attachments tab, click Add**

   The Add File page appears. You can add up to five files at one time.



4. **Beside the first Filename field, click Browse**

   The Choose File dialog box appears. You can use the dialog box to navigate to the folder in which the file you want to attach is located.

5. **Select the file**

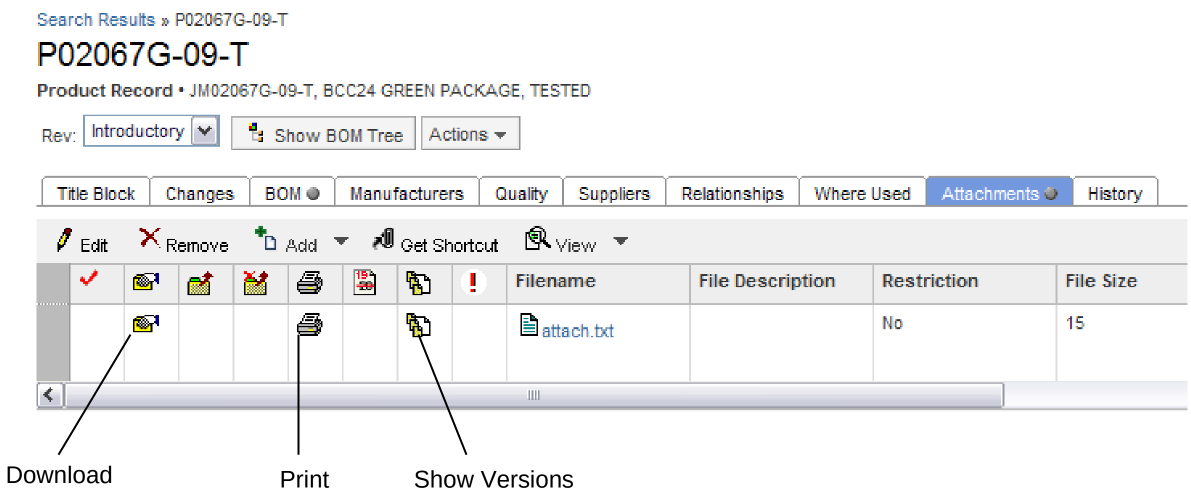
6. **Click Open**

   The path to the file and its name is entered in the filename field. You can use the description field to add a file description. And the Unzip check box allows you to tell the system to automatically unzip any files that may be zipped once they are stored in PLM.

2.5 – Add an Attachment

7. Click OK

The file is uploaded and you return to the Attachments tab. The file is listed in the attachments table. You can edit or remove the attachment. You can add new attachments and copy the attachment to your clipboard using the get Shortcut button. You can also View the attachment in its native application. In the attachments table line, you have the ability to download the attachment, print it, and view the history of the file using the Show Versions button.



2.6 – View an Attachment

When you open attachments from PLM, the attachment opens in the PLM viewer.

1. **If necessary, open an item**
2. **If necessary, click the Attachments tab**
3. **Click the filename of a listed attachment**

   The item is opened in the PLM viewer.