### **Item Creation**

**1.0 PURPOSE AND SCOPE**

This procedure is to provide a consistent and documented system for creating items and controlled documents.

**2.0 AFFECTED DEPARTMENTS**

Engineering

Logistics-Purchasing

Production

Sales and Marketing

**3.0 REFERENCE DOCUMENTS**

D0001.1017 Document Control System

D0001.1024-1 Item Creation Form

D0001.1073 RoHS Policy

D0001.1126-1 Quality Records Matrix

D0001.4029 Document Control Item Creation Responsibilities

**4.0 RESPONSIBILITIES & AUTHORITY**

* 1. **Engineering**

Engineering is the owner and author of this procedure and the Item Creation Form, and is primarily responsible for originating the Item Creation Form. Engineers can create outside service item numbers on the item creation Form for the parent item by placing a note in the additional notes or specifications section.

* 1. **Document Control**

Document Control is responsible for the accuracy, handling, processing and distribution of the Item Creation Form.

* 1. **Logistics-Purchasing**

Purchasing has authority to create or authorize the creation of items that are used within the BSD and attached to outside services in order for costing to work properly. These items will be distinguished with an OS prefix on the parent item number and the description field will describe the outside service.

Example: If there were an item M1111.02 which consists of another part, M1111.01, being sent for laser engraving. The outside operation for the laser engraving will require a material and the item number for this material would be OSM1111.02. Purchasing can create the OSM1111.02 item.

Logistics-Purchasing is responsible for providing cost information associated with Target COGS for purchased items.

* 1. **Production**

Production is responsible for providing information associated with Target COGS such as labor estimates for manufactured items.

* 1. **Sales and Marketing**

Sales Management is responsible for entering associated pricing data and Marketing Descriptions.

**5.0 DEFINITIONS**

**ATEX:** Two EU directives describing what [equipment](http://en.wikipedia.org/wiki/Equipment) and work environment is allowed in an environment with an explosive atmosphere.

**BSD:** Business Systems Database

**COGS:** Cost of Goods Sold. This is basically the cost of the material to make a product.

**FG:** Finished Good. This is an item, or sellable product that is a combination of Raw Materials and/or Subassemblies. It may also be a single purchased item that is passed through as a sellable product.

**Item:** An item is anything that has an item number associated with it, such as a physical part, electronic file, document or process.

**MSDS:** Material Safety Data Sheet. The MSDS is a form with data regarding the properties of a particular substance, and is provided by the supplier.

**6.0 SAFETY PRECAUTIONS**

For any item that contains hazardous or controlled materials, the appropriate standards, regulations and handling procedures should be followed. Consult the Safety Officer to determine which standards, regulations and procedures are applicable.

**7.0 EQUIPMENT & MATERIALS**

* Personal Computer

**8.0 INSTRUCTIONS**

* 1. **Getting the Form**

The Item Creation Form, D0001.1024-1, is available electronically.

* 1. **Item Creation Form**

All fields within the Item Creation Form are to be entered according to the following information.

**Date** **–** This is the date when the Item Creation Form is initially created.

**Originator** **–** Name of the person completing the form and creating the item.

**Item Number –** A unique item number (or part designation) is selected according to the Document Control System (D0001.1017).

**Item Description –** An item description must be entered that conforms to the Document Control System (D0001.1017).

**Product Code –** Select a product code from each of the two drop-down lists. The left drop down list indicates if the item is a finished good, raw material, or a subassembly, while the right one indicates the general category where the item will initially be used.

* **Finished Good –** A sellable product that is a combination of Raw Materials and/or Subassemblies. It may also be a single purchased item that is passed through as a sellable product.
* **Raw Material –** A single purchased component item that is intended to be part of a Subassembly or Finished Good.
* **Subassembly –** A combination of Raw Materials and/or other Subassemblies.

**Prototype –** Select Yes if the item is initially intended to be a pre-released manufactured prototype. If Yes is selected then a (^) will be placed in front of the item description within the BSD. When the item is formally released then instructions are given to remove the (^) from the description. Do not select N/A.

**Type –** Select one of the following to categorize the item type.

* **Material –** An item that will eventually be sold to a customer, either by itself or assembled with other materials into a final product. Materials are normally allocated and consumed in the manufacturing process.
* **Fixture –** Devices which support materials or tools during the manufacturing process. Fixtures are normally not consumed by the manufacturing process.
* **Tool –** An item used by a machine or operator to perform an operation. It is possible that tools are consumed in the manufacturing process, but they are often reusable.
* **Other –** Items that do not fall into any of the other Type categories. These items might include internal documentation, manufacturing process descriptions, or R&D material such as prototypes.

**Source –** Select one of the following to identify the source of the item.

* **Purchased –** This indicates that the item is primarily purchased from a supplier outside Larson Davis.
* **Manufactured –** This indicates an item that is manufactured from within Larson Davis.
* **Transferred –** This is an item that is transferred to Larson Davis from another PCB Piezotronics division.

**Unit of Measure –** Select the Unit of Measure from the drop down list that most closely matches the item. NOTE: This cannot be changed after the item has been created and transactions entered.

**Manufacturer’s Name –** If the item is a purchased item, enter the manufacturer’s name. If the item is a generic item available from multiple sources (i.e. any manufacturer will do), then enter “GENERIC”. The manufacturer listed first is the primary manufacturer and will be ranked number 1 in Vendor Cross Reference. Additional manufacturers may be added and assigned the next number in the ranking order.

**Manufacturer’s Part Number –** If the item is a purchased item, enter the manufacturer’s part number. If the item is generic then enter the industry standard part number, if applicable.

**Drawing Number –** If applicable, enter the Drawing Number associated with the item according to the Document Control System (D0001.1017).

**Drawing Revision –** A Drawing Revision is required to be entered for all items that have a Drawing Number. Firmware and/or software items are also required to have a revision entered in this field. Use the revision identifier (i.e. A, B, 1.0, 2.11, etc.) that is planned for the upcoming release.

**Inspect Incoming Items –** Select Yes if the item requires inspection when it is received. If yes is selected, then the details are to be placed in the Inspection Requirements section and any associated documentation needed for inspection must be created.

**Hazardous or Controlled Material –** Select Yes if an item is considered hazardous or has regulatory or unique requirements for storage and handling. Inform the Safety Officer if Yes is selected.

**MSDS –** Select Yes if there is a Material Safety Data Sheet (MSDS) associated with the item. Provide a copy of the MSDS to Document Control for processing.

**ATEX –** Select Yes if the item is an ATEX approved product or a component of an ATEX approved product.

**ABC Code All items should be set to C when they are first set up. Automated systems will then change the code to A, B, or C when the process is run every six months.**

**RoHS Status –** A RoHS status must be declared for all items. See D0001.1073 for the RoHS Policy. The approved Product Requirements Document will specify if a product, and associated component items, must be RoHS compliant.

* **(U) Unknown** – This category is for items that are intended to be Not Compliant and are typically associated with older, legacy, products that are not expected to meet RoHS compliance. This category is not to be used for new products.
* **(E) Exempt** – Few items are exempt from RoHS and the exemptions are very specific. Verify and document that the item is exempt before selecting this option. Typical exempt items include Lead-Acid Batteries and Nickel-Cadmium Batteries.
* **(R) Requested** – This is not to be used for Larson Davis items.
* **(C) Compliant** – An item is considered Compliant when it can be verified and documented that the supplier is providing material according to RoHS guidelines. This means having less than the maximally defined amounts of Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated Biphenyl (PBB), and Polybrominated Diphenyl Ether (PBDE). Appropriate evidence of compliance from a supplier includes a published spec/data sheet, letter of compliance, listing in a compliance registry, email statement, or other documented proof of conformance.
* **(N) Not Compliant** – Items that don’t meet RoHS requirements are assigned to this category. If the RoHS compliance of an item is unknown, or in process, it should be listed as Not Compliant. This is intended to be temporary with the status eventually moving to one of the other categories.
* **(Z) Not Applicable** – Only a few items qualify as Not Applicable to RoHS. These are generally non physical items such as software, intellectual property, policies, processes, procedures and work instructions. If electronic items, which are considered Not Applicable to RoHS, are transferred to physical media then the physical item must have its RoHS status declared. Physical items that are not shipped to a customer, such as stencils and fixtures may be assigned this category.

**RoHS Cleaning Tolerance –** Select Yes if the item is an electrical component and can be cleaned with the Kyzen cleaning process. Typically this means that the electrical component can withstand submersion in an alcohol based bath. Select No for items that are not applicable. Do not select Unknown.

**RoHS HiTemp Tolerance –** Select Yes if the item is an electrical component that is assembled using a lead-free soldering process and can withstand temperatures at least 260°C. Select No for items that are not applicable. Do not select Unknown.

**FG Type –** Select one of the following for the type of Finished Good (FG):

**Stock** – The Finished Good item will be stocked and shipped from inventory.

**Standard** – The Finished Good item is not stocked, but subassemblies and raw components are stocked to facilitate manufacture of the Finished Good within 2 weeks.

**Special** **–** Finished Goods, subassemblies and raw materials are generally not stocked. For items where FG type is special, the ‘count on receipt’ flag should be set on the Item Warehouse tab within the BSD.

**Kit Flag –** Select No, unless it is determined with Logistics to be marked as Yes.

**Military Use –** Select Yes if the item is used on any product designed for the military.

**Schedule B/HS Tariff Code # –** This is the Export Control Number required for all Finished Goods and any Subassembly that will be sold internationally. A definition of the codes can be found at <http://www.census.gov/foreign-trade/schedules/b/>.

**Pricelist Addition (Place on Pricelist) –** Select either Yes or NO to indicate if this item is to be placed on the pricelist for sale/distribution. This only applies to finish good items. CHECK with Sales if there are questions.

**Serialized Product Tracked in LD Database?** – Select Yes if the FG item is to be serialized and entered into the Larson Davis tracking database.

**US List Price, Int’l List Price, Int’l Dist Net, Repair Pricing, Calibration Pricing –** Sales Management is responsible for entering the pricing data. If the price information is unavailable when this form is generated it will be provided once it becomes available.

**Target COGS –** This is the estimated cost of the item based on preliminary quotes or historical data. Production is responsible for entering the Target COGS for internally manufactured items, while Logistics-Purchasing is responsible for entering the Target COGS of a purchased item.

**Repair Code –** Select the appropriate category from the drop down list for items that are repairable by Larson Davis. Leave this field blank if the item is not repairable.

**Calibration Code –** This is a unique identifier which a customer would use to order a calibration of the item being created. The unique identifier is created through a collaborative effort between Engineering, Production and Sales/Marketing. Leave this field blank if calibration is not offered for this item.

**Marketing Description –** The Marketing Description is provided by Sales Management.

**Allocation Method** – This box will always be marked as a 2. This is to ensure that the location/lot/serial allocations is documented. Document Control will ensure that this box is checked correctly on the Item Creations Form (D0001.1024-1)..

**Shipped Items –** This box is not on the Item Creations Order Form. However, there is a box in SyteLine that must always be checked on the Ship Tab. This will ensure that the items will be communicated correctly into the shipping system used by Logistics.

**Additional Notes –** This space is for any additional information that is to be included in the “Specifications” area of the BSD system, or for additional Document Control instructions.

**Document Control –** This section is completed by the Document Control Clerk upon receipt and review of the Item Creation Form.

**8.4 Submitting the Form**

The Item Creation Form is submitted to Document Control after the appropriate information has been entered. The primary method for submitting an Item Creation Form is electronically, however, a handwritten form is acceptable, if necessary.

**8.5 Document Control**

**8.5.1** Preliminary Review

Document Control reviews the submitted form for accuracy by verifying that the item number is unique and that all applicable information is entered. If the Item Creation Form is incomplete or incorrect, it will be returned to the originator for correction and re-submission to Document Control.

**8.5.2** Processing the Form

When Document Control receives an Item Creation Form, the appropriate information is entered into the current BSD and, as appropriate, into an Item Number tracking database. Document Control completes the Document Control section of the form and stores it according to Document Control procedures.

**8.5.2** Approval

Engineering must approve all Item Creation Forms submitted by non-Engineering personnel.

**9.0 INSPECTION**

Document Control will inspect the Item Creation Form for accuracy and completeness.

**10.0 RECORDS**

After an Item Creation Form has been entered into the current BSD the form is stored in Document Control. Retention of the forms is per the Quality Records Matrix (D0001.1126-1).

**11.0 DISTRIBUTION**

Distribution is through electronic access to the online Document Control area or by contacting Document Control.

**12.0 REVISION HISTORY**

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| --- | --- | --- | --- | --- |
| **DCO #** | **REV** | DATE | **INITIALS** | **CHANGES MADE** |
| 254A | B | 27Mar2001 | AJR | Updated terminology, formatting and item designation steps (to be consistent with the recent Item Numbering Procedure changes). |
| 379A | C | 1/24/02 | SW | Added section for initial of CAD System Model. Also removed reference to D0001.1019 which has been obsoleted, and added reference to the new Document Control System. |
| 421 | D | 4/22/02 | SW | Added section for Prototype items, referenced document control system for obtaining document numbers |
| 465C | E | 9/23/02 | MB | Added that item creation forms must have a product code and a commodity code. |
| 801 | F | 8/25/04 | SLB | Added a section talking about Engineers approval of a item creation form |
| 855 | G | 4/25/05 | SLB | Added a section regarding the creation of PCB items |
| 979 | H | 10/24/06 | HKH | Added RoHS info |
| 1000 | I | 4/3/07 | HKB | Updated to reflect new database |
| 1019 | J | 6/11/07 | HKB | Added Schedule B # and sales pricing section |
| 1045 | K | 10/16/07 | HKB | Added additional fields as requested by Sales and Marketing. Updated format of form. |
| 1052 | L | 11/19/07 | HKB | Added ABC code and FG Type |
| 1186 | M | 4/21/09 | KMC | Removed document number creation, reformatted document, updated item creation form, changed ‘part’ to ‘item’ |
| 1263 | N | 9/2/09 | KMC | Added authorization for Purchasing to create items needed for outside services. |
| 1362 | O | 02/23/12 | BD | Added RoHS Status definitions, and clarified other definitions |
| 1412B | P | 11/8/12 | HSA | Updated section to reflect the Allocation box. |
| 1426 | Q | 2/19/13 | HSA | Update section to reflect that the Shipped items check box must be checked within the database. |
| 1436 | R | 8/19/13 | HAS | Changed to provide information on finished good items |
| 1613 | S | 2/24/16 | LAB | Moved “FG Type” definitions to just below “RoHS HiTemp Tolerance” to match changes on Item Creation Form (D0001.1024-1). Added “HS Tariff Code” to Schedule B# to match SyteLine. Edited “Shipped Items” section to match changes on the Item Creation Form (D0001.1024-1). Added verbiage to state that Shipped must always be marked in SyteLine. |
| 1731 | T | 7/26/17 | DAR | Bring ABC Code into line with current procedures |