ORACLE

Part Number, Revision and Interchangeability Rules for Orderable and Manufacturing Items

Document Number and Revision: PROC-10050 Rev 03

Overview

This document establishes the following:

- Conventions for the numbering of orderable items, manufacturing items, and controlled documentation used in the design, manufacture, and servicing of Oracle hardware products.
- The conventions for identifying the revision level of these items.
- The rules of interchangeability, which determine when a revised item must be identified with a new revision number only or with a new part number

Audience

This document is for Oracle hardware business, manufacturing partners, and supporting suppliers.

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Introduction

The numbering conventions described in this document will be used to identify most new orderable and manufacturing items created after the go-live of Oracle Cloud Applications for hardware products.

Existing manufacturing and marketing items will retain their current identifying numbers and revision sequence until they undergo a non-interchangeable engineering change or a change requiring a high level of traceability as deemed necessary by management to ensure that purging, rework and other necessary corrective actions can be completed.

1 Item Numbering Conventions (Non-Significant)

The conventions defined in **Table 1-1 Definition of Item Numbering Conventions** below will be used to derive identifying numbers of manufacturing items that are created after the implementation of Oracle Cloud Applications.

- **New Configured Item:** The following items will utilize the **configured** item numbering convention:
- Assemble-to-Order (ATO) systems.
- Embedded Assemble-to-Order (EATO) boards or subsystems.
- **New Manufacturing Item:** All new ECO-controlled hardware ~~or~~ items, excluding process documentation.
- **New Marketing Item:** All new orderable hardware items.
- **New Document**: Process documentation. Documents cannot be structured to product bills of material (BOMs) as reference items.

Table 1-1 Definition of Item Numbering Conventions

Convention	***Length***	***Char Set***	***Format Definition***	***Examples***
New Mfg Item	≥ 7	0-9	**[sequence number]** Issued in sequence starting from 8200000	• 8201873
Legacy Mfg Item	≥ 3	0-9 A-Z -	Many legacy formats	• 7044607 • 7328148 • F371-4953-01 • 805-0623-G01-FGM • F371-4953-01 • 240-7639-01 • 314810601

New Marketing Item	≥ 7	0-9	**[sequence number]** Issued in sequence starting from 7600000	• 7600550
Legacy Marketing Item	≥ 4	0-9 A-Z - #	Many legacy formats	• 6440A • 333A-25-10-EURO • #541-2146-N • 7104497
New Configured Item	≥12	0–9 -	**[model_*number*]-[*sequence number*]** Where '-' is used consistently as a separating character	• 7600550-9910 • 7119763-10058
Legacy Configured Item	≥ 6	0-9	Many legacy formats	• 34579692+1+1 • 9146725-1 • 2415725-1-3
New Document	≥10	0–9 PROC -	**PROC-[*sequence_number*]** Issued in sequence from a starting value PROC-10000	• PROC-10058
Legacy Document	8	0-9 -	Many legacy formats	• 917-1335 • 913-2884-10 • 923-7020132-23 • 915-7044566 • 7061823

2 Item Revisions

The conventions defined in **Table 2-1 Definition of Item Numbering Conventions** below will be used.

Table 2-1 Definition of Item Revisions

Revision Convention	***Length (characters)***	***Character Set and Sequencing***	***Starting Revision of a New Item Number***
Numeric (standard)	2	01, 02, 03, ..., 99	01
Legacy	1-10	Any combination of numeric character (0-9) or alphabetic character (A-Z) character, or dot (.)	n/a

3 Rules of Interchangeability

When an engineering change controlled item is modified or revised, the team processing the change order needs to determine if it is appropriate to indicate this modification by changing the revision level or the part number of the item. The rules of interchangeability provide a standardized method for making

consistent choices that effectively minimize the impact and cost to Oracle and its customers. They take into consideration the ability of the business to track and successfully implement corrective actions that may have been initiated for a variety of reasons. **These rules must be followed when determining the interchangeability of an item and, the potential requirement to create a new item number rather than a revision change**

3.1 Non-Interchangeability: Changing the Item Number

If a new iteration of a part must be stocked in a different inventory bin because it is not compatible with previous iterations, it is deemed not interchangeable, and a new part number must be issued to it. **A new item number is required regardless of product lifecycle if physical material has been procured and is available to use, or in any sort of partial assembly in the Supply Chain**. Changes to form, fit, or function do not necessarily result in replacement items being non-interchangeable. In fact, excluding the correction of documentation errors, if the specification of an item is modified or updated it will change either its form, fit, or function. A cost change does not necessarily require an item number change based on the cost update alone.

NOTE 1: A new item number is required for non-interchangeable items regardless of product lifecycle if physical material has been procured and is available to use.

Changing the identifying number of an item may require the following actions to take place:

- Creating new bins or storage locations physically and in control systems
- Releasing additional ECOs to replace the item in the bills of material
- Performing additional data entry and item attribution in the control systems
- Managing effective dates in bills of material
- Reworking or scrapping of replaced non-interchangeable material

3.2 Interchangeability: Changing the Revision Level

Interchangeable items are revision controlled and items are capable of being put or used in the same place, assembly, or product with no change in performance and no degradation in reliability, safety, or customer specification. Interchangeable items are also identified as demonstrating backwards and forward compatibility within products they are used in. Therefore, the test of interchangeability can be formulated as follows: **Oracle and its suppliers can store production inventory and exchange one part for another with no resulting negative effect in all applications. Inventory must also be both backwards and forwards compatible.**

When the revision level of an item is changed, the item numbers and revision levels of all higher-level assemblies remain the same.

3.3 Interchangeability Criteria

When the form, fit, and/or function of a manufacturing item is being changed on an Agile ECO, use the following criteria to determine whether it, the lowest level item being revised, or any of its higher-level assemblies are assigned new item numbers.

3.3.1 Conditions Requiring a New Item Number

Firmware retains its item number unless it is no longer directly comparable to the previous version. For all other items, if the change meets any of the following conditions, a new item number must be issued to it to indicate non-interchangeability with the prior version:

1. The revised and replaced versions are not interchangeable – **not backward and forward compatible** – in all applications.

NOTE 2: As a result of revising a manufacturing item, teams must evaluate the need to also and independently change either the revision level or the item number of the supporting specifications, drawings, or schematics to properly associate the new requirements that apply to the revised item.

2. The revised and replaced versions of the item cannot be mixed in one parent item for functional or technical reasons.
3. The revised item must be implemented by a given date or deadline.
4. The revised item and another item in the same parent assembly, which is not controlled by a single specification or drawing, must implement together.
5. The change was initiated by a field safety problem, quality escalation, or field purge, or the dangerous-goods status is changing.

NOTE 3: For proper attribution updates across data systems, processes require that changes to Oracle Cloud Applications PLM dangerous-goods attributes which result in a change to the dangerous-goods status (*Non-DG Status* attribute*)* be processed on engineering change orders and be accompanied by a change in item number.

3.3.2 Iteratively Applying Criteria

If the item number of the lowest item is changed, iteratively apply the same criteria listed in ***Section 3.3.1, Conditions Requiring a New Item Number***, on page 5, to each parent item to see if any of them also needs to be assigned a new item number.

Continue to apply the criteria to successively higher (parent) assemblies until they each become interchangeable or until the parent assembly is an orderable (marketing) or planning item, such as those items having Oracle Cloud Applications item types of ATO HW ITEM, PTO HW ITEM, or HW PLANNING BOM ITEM.

3.3.3 Changing the Revision Level

If none of the conditions listed in ***Section 3.3.1, Conditions Requiring a New Item Number,*** on page 5, are met, the item is interchangeable, its item number is retained, and only its revision level is incremented. All higher-level assemblies retain their item numbers and revision levels.

3.3.4 Examples of Conditions Meeting Criteria

Table 3-1, Examples and Effectivity Scheduling, on page 6, presents examples of situations that meet the numbered criteria in ***Section 3.3.1, Conditions Requiring a New Item Number***, on page 5. It also defines the required effectivity date or time span within which the new version must be scheduled to become effective.

Table 3-1 Examples and Effectivity Scheduling

Non-Interchangeability Condition Met	Example	Effectivity Scheduling
1	A part is modified to work in a new platform and no longer functions in some or all of the older ones.	As needed.
2	The branding or external colors of a system are changing.	As needed.
3	European regulations are causing power supply designs to change in order to continue to ship there.	As needed or by regulatory deadline.
4	The method of attaching a bracket to a board is changing and both the bracket and the board must be changed.	As needed. Use the same date for items that must be implemented together.
5	The design of a power supply will change after units started short-circuiting in the field.	As needed based on severity of issue
n/a (Item is Interchangeable)	A system board is being changed to correct a few low-priority, intermittent bugs.	Date of ECO Release [1]

[1] Production of the superseded revision must cease within the lead time of procurement of the new revision.

Related Information

Reference Documents and Records

REFERENCE DOCUMENTS AND RECORDS

Document History

Rev	*Date*	*Description of Change*	*Originator*
01 A	27 Jan 2006	Initial release	N/A
01 B	17 Apr 2009	Update document and editorial changes	N/A
02 A	12 Jul 2011	Established new item numbering conventions for both configured ATO items and fixed-BOM items. Established new revision numbering sequencing rules. Documented new rules of item interchangeability.	N/A
		Fusion History	
02 D	22 Jun 2020	Update to include transition to Oracle Cloud Applications	N/A
03	09 Dec 2022	Update to Redwood format. Updated title. No content changes	N/A

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