ORACLE

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Specification of Identification Labels for Packaged Finished Goods

Overview

This specification defines bar-coded identification labels which are applied to all containers of finished goods. These labels are used throughout Oracle's manufacturing and distribution network to identify the contents, source and dates of manufacture, repair, rework and remanufacturing. The printed content, layout and application of these labels are defined for six distinct types of identification labels.

Audience

Internal and external manufacturers of Oracle finished goods and building blocks of engineered systems.

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1 PURPOSE

This specification establishes the requirements for identifying containers of finished goods and building blocks of engineered systems with labels which identify the product inside.

The identification labels provide the customer with an orderable (marketing) part number at the top to correlate to their sales order, packing list and commercial invoice. The labels also provide the Oracle manufacturing part number which is used to identify the container through manufacturing and distribution. The identification labels also identify the source and date of manufacture or repair.

2 SCOPE

This specification applies to all of Oracle's packaged finished goods or to those orderable items which include this specification as a reference item on the bill of material (BOM) or in contract exhibits. It applies to:

- Externally sourced Hardware Buy (HW BUY) building blocks that get integrated into engineered systems
- PTO Hardware Items (PTO HW ITEM) whether systems, spares or aftermarket options
- ATO Configured Items (ATO CONFIG ITEM) whether systems or kits
- Master packs of any of the above items

This specification applies whether the product is manufactured internally or externally. It also applies to Advanced Product Line (APL) products, which are jointly marketed by Oracle and Fujitsu.

If the exterior packaging is already printed with:

- Packaging Material Identification Marks (which are required/recognized by ISO/EU, Korea, Japan, and China)
- CE Mark
- WPM EPR Number, per India Plastic Waste Management Rules, 2016 (As amended)

Then these marks are not required to be included on the 950-1419 Product Finished Goods Bar Code Label.

The CE Mark and the India PWM EPR Number can also be excluded from OEM packaging or the Product Finished Goods Bar Code Label, if the OEM product Agency label or the OEM packaging materials includes these marks. However, there is no downside to including these marks on both the product Agency label, **and** the packaging or the packaged finished goods bar code label and including in both locations is highly recommended by Oracle.

This specification does not define bar-code labels applied to the following kinds of items:

- **Raw material containers** - Requirements for labeling containers of raw material delivered to Oracle or an Oracle contract manufacturer are defined in *WWOPS Quality: Specification of Bar-coded Identification Labels for Packaged Raw and Semi-Finished Materials, 917-1335.*
- **Unpackaged hardware, systems and sub-assemblies** - Requirements for labeling systems and sub-assemblies are defined in *Identification, Labeling and Bar-coding Standards for Assemblies, 950-4477-03.*

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3 APPLICABLE EXEMPTIONS AND STANDARDS

3.1 Exemptions: See Appendix C for current products exempted from this specification.

3.2 Standards

The table below lists industry standards that are referenced in this document.

Standard	Title	Use / Description
EIA[1] 556B	*Outer Shipping Container Label Standard*	Provides instructions for producing and applying labels containing bar code symbols or labels containing two-dimensional symbols onto shipping containers.
ISO[3]/IEC[2] 16388	*Automatic Identification and Data Capture Techniques - International Bar Code Symbology Specification - Code 39*	Defines the Code 39 bar code symbology, which is a linear (one-dimensional) symbology suitable for encoding general purpose alphanumeric data. It is a reference symbology for many industry standards and can be used to encode a standard set of characters or full ASCII.
ISO[3] 3166	*Codes for the representation of names of countries and their subdivisions*	Defines three sets of country codes, alpha-2, alpha-3, and numeric-3, listed by full English and French country names. This specification utilizes the alpha-2 codes.
ISO[3] 8601	*Data Elements and Interchange Formats - Information Interchange - Representation of Dates and Times*	Defines an international convention for representing date and time.
ISO[3]/IEC2 15416	*Automatic Identification and Data Capture Techniques - International Conformance Specification - Linear Bar Code Symbol Print Quality*	Provides a standardized method of measuring and grading one-dimensional bar codes on first-pass readability. It is applicable to Code 39 and 128 symbologies. This specification utilizes the Code 39 symbology.
JEDEC[4] JEP106	*Standard Manufacturer's Identification Code*	Provides a standard for identifying a manufacturer in a digital field. This specification converts this digital value to hexadecimal characters.

1.

1. EIA is the Electronic Industries Alliance
2. EC is the International Intertechnical Commission
3. ISO is the International Organization for Standardization
4. JEDEC, previously the Joint Electron Device Engineering Council, is now the JEDEC Solid State Technology Association

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4 TYPES AND SIZES OF LABELS

4.1 Types of Identification Labels

This specification defines five types of labels. They are:

1. Pick-to-order (PTO) product and HW BUY building blocks to be integrated into engineered systems.
2. Assemble-to-order FRU/X-OPT product.
3. Racks and Single Pack Servers.
4. Multiple assembled-in statements, if significant content which is not physically joined (except by packaging) originates from multiple sources.
5. Serial numbers of master-packed or over-boxed product of same part number, whether over-boxed in distribution or boxed as a multi-pack by the supplier.

4.2 Sizes of Identification Labels

The recommended and maximum sizes of the six types of identification labels are defined in *Table 4-1*.

Table 4-1 Size of Identification Labels

Label Type	**Recommended Size** width x length	**Maximum Size** width x length	**Use**
Type 1	4.00 in. x 4.00 in. (10 cm x 10 cm)	6.50 in. x 6.50 in. (16.5 cm x 16.5 cm)	FRU or XOPT packages. PTO product containers with side panels taller than 3 inches in height
Type 2	4.00 in. x 2.00 in. (10 cm x 5 cm)	6.50 in. x 6.50 in. (16.5 cm x 16.5 cm)	FRU or XOPT packages. ATO product containers
Type 3	4.00 in. x 6.00 in. (10 cm x 15 cm)	6.50 in. x 6.50 in. (16.5 cm x 16.5 cm)	Racks and Single Pack Servers. Multiples of the same serialized finished-good product is packaged in one container, either by over-boxing or multi-pack
Type 4	4.00 in. x 2.00 in. (10 cm x 5 cm)	6.50 in. x 6.50 in. (16.5 cm x 16.5 cm)	All containers with significant, separate content of mixed origin in addition to a Type 1, 2, 3 or 4 label.
Type 5	4.00 in. x 4.00 in. (10 cm x 10 cm)	6.50 in. x 6.50 in. (16.5 cm x 16.5 cm)	All containers with significant, separate content of mixed origin in addition to a Type 1, 2, 3 or 4 label.

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5 FORMATTING OF PRINTED INFORMATION ON IDENTIFICATION LABELS

The size, spacing and characteristics of the human-readable and bar-coded information is defined in *Tables 5-1* through *5-4*.

The Artwork for ORACLE generic product labeling requirements, for all labels are Fusion part numbers 8215902 and 8215903. This printed content must use the **correct PACKAGING CONTENT logos** to reflect the packaging materials used, **Corrugated Fiber Board or Polyethylene Mailer**.

5.1 Sizes of Human-Readable Characters

The minimum size of human-readable characters are specified in the *Table 5-1. Table*

5-1 Characteristics of Human Readable Characters

Label Type	**Minimum Height of Characters**		
	Orderable Part Number	**Identifiers and Data Values** *except UPC Number*	**UPC Number**
Type 1 and 2	0.20 in. (5.0 mm)	0.12 in. (3.0 mm)	0.10 in (2.5 mm)
Type 3, 4, 5, and 6	0.18 in. (4.6 mm)	0.10 in. (2.5 mm)	0.10 in (2.5 mm)

5.2 Characteristics of Human-readable Characters

Table 5-2 Characteristics of Human Readable Characters

Characteristic	**Content/Value**
Character Set	numerals 0 through 9; **capital letters** A through Z; asterisk (*); dash/hyphen (-)
Typeface/Font	one without serifs (sans serif)
Max. Character Compression	Orderable Part Numbers: 40% of standard character width
	Other Identifiers and Data Values: 60% of standard character width
Print Color	black

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5.3 Characteristics of Bar Codes

Table 5-3 Characteristics of Bar Codes

Bar Code Characteristic	**Code 39**	
Standard	ISO/IEC 16388	
Check Digit	none	
Data Identifiers	none	
Wide-to-Narrow Ratio	between 2.0 : 1 and 3.2 : 1	
Symbol Height Minimums	Label Types 1 – 5 : 0.220 in. (5.6mm)	
Print Quality	Minimum Grade 1.5 (C) using aperture 0.010 in. (0.254 mm) and wavelength 660 nm =/- 10 nm per ISO 15415, *International Conformance Specification - Linear Bar Code Symbol Print Quality*	
X Dimension	0.010 inch (0.254 mm) to 0.017 inch (0.432 mm)	
Quiet Zone	Minimum 10 times the X Dimension	
Print Color	black	

5.4 Placement and Spacing of Human-readable and Bar-coded Characters

Table 7-1 specifies the information required to be printed on the six types of labels. Wherever information is bar-coded, the bar code is placed directly below or to the right of the human-readable characters and spaced apart as defined in *Table 5-4*.

Table 5-4 Placement and Spacing of Human-readable and Bar-coded Characters

Measurement	**Minimum Distance**
Spacing between human-readable and bar-coded characters, vertically	0.01 in. (0.25 mm)

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Spacing of characters from edges of label, vertically and horizontally	0.05 in. (1.2 mm)
Spacing above human-readable characters, vertically	0.01 in. (0.25 mm)

6 Data Elements on Identification Labels

The data elements which are printed on the six types of labels are defined in *Table 6-1.* They are printed as required in *Section 7*. Additional information may be printed at the bottom of the label to meet product specific needs.

Table 6-1 Printed Data Elements for Identification Labels

Data Element	Description of Content/Value
Orderable Part Number(s)	This element indicates the model number by which an Oracle customer or vendor can order the product from Oracle. All current applicable orderable part numbers, including those for vendor sales, are required to be printed and separated from each other by a space, a slash and another space (/). Applicable orderable part numbers are posted in Supplier Portals. Do not truncate or abbreviate the order part numbers, and use multiple rows at top of label if necessary to show all applicable numbers. For ATO products, use the item number of the ATO Model in FUSION For example: **7104030** PTO products use the item number(s) of the PTO Hardware Item in FUSION For example: **7104038** NOTE 1: Oracle's newer Orderable Part Numbers have non-significant numeric values. Orderable Part Numbers are not assigned to Hardware Buy building blocks of engineered systems. Refer to 990-1241.
TLA Mfg Part Number (PN)	This element indicates the Oracle-assigned manufacturing part number of the packaged finished-good assembly or kit that has an item type of Hardware Finished Goods Buy, Hardware Finished Goods Make or ATO Config Item. This number is used for identification in manufacturing and distribution. For ATO products, use the item number of the ATO Config Item in FUSION. For example: **PN: 7603352-17944** For PTO products, use the item number of the HW FG BUY or HW FG MAKE item. For example: **PN: 8208428** For engineering system building blocks supplied to Oracle internal manufacturing use the HW BUY item. For example: **PN: 7012635** **Labels for Fujitsu product must print format:** “Oracle® PN” instead of “PN” NOTE 2: New Oracle manufacturing part numbers have non-significant numeric values. Refer to 990-1241.

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Fujitsu Mfg Part Number (FUJITSU PN)	This element indicates Fujitsu's part number assigned to those manufacturing items that are also sold by Fujitsu. It is applicable to finished goods that are part of the APL, or newer, partner agreements. For hard-disk drive spares and after-market options, refer to 950-5871-xx, to find the corresponding Fujitsu Manufacturing Part Number. For example: **FUJITSU PN: CA07855-H161**

Data Element	Description of Content/Value
Fujitsu Part Revision (REV)	This element indicates Fujitsu's revision level of a manufacturing item that is also sold by Fujitsu. It is applicable to finished goods that are part of the APL, or newer, partner agreements. For hard-disk drive spares and after-market options, refer to 950-5871-xx, to find the corresponding Fujitsu Part Revision. For example: **REV: 07** NOTE 3: Oracle-designed parts that have item numbers without a dash level use: REV: 01
Part Number of Primary In-Box Item (IN-BOX PN)	This element indicates the Oracle manufacturing part number of the primary physical item inside the container. The primary item inside the container of a fixed configuration is usually the highest level item, within the Oracle's FUSION bill of material (BOM), attributed as: *Service Item: Yes*. This part number must be marked on all packaged spares if the Service Item is identified as a component item in the BOM of the finished good. For example: **IN-BOX PN: 7026881** indicates the part number of the Service Item inside the container of FRU-subclass item 7017842. When there are multiple different primary items in the container, do not mark the part number of the primary physical items, the identifier 'IN-BOX PN:' or a corresponding bar code. **Labels for Fujitsu product must not print: "IN-BOX PN"** NOTE 4: Because of the transition to non-significant part numbers, the Manufacturing Part Number on the carton label may be completely different from the part number of the item (Service Item) inside the spares container. The part numbers of packaged spares no longer have related orderable and manufacturing part numbers, such as #541-2286, F541-2286-02 and 541-2286-02. Refer to 990-1241 for a definition of non-significant item numbers.
Vendor Part Number (VENDOR PN)	This element identifies the manufacturer's part number, from FUSION, corresponding to an unbracketed hard-disk drive or solid-state drive. Marked vendor part numbers must have a qualification status code of *T - Tested* or *Q - Qualified* in FUSION. Refer to 7337255. For example: **VENDOR PN: 0B25651** indicates the manufacturer's part number corresponding to the base drive, 390-0487-02. **Labels for Fujitsu product must not print: "Vendor PN:"**
Work Order Number (WO)	This element indicates the production order that controlled the manufacturing of the item. For example: **WO: 297842** **Labels for Fujitsu product must not print: "WO:"**
Serial Number (SN)	This element indicates the serial number of the packaged-level manufacturing item (TLA Mfg Part Number). Items requiring serial numbers will have the serial control attribute set to *Yes* in FUSION and/or on the FUSION-generated ECO. If only one serialized item is contained in the package, use (promote) the serial number of the

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	contained item. If two or more separate serialized items are contained, generate a new serial number or promote the serial number of the primary serialized item. Peripheral Kits (P-Kits) can use the serial number of the keyboard to be the serial number of the kit. To determine the recommended format of serial number, refer to 923-3383. For example: **SN: 1307FM0293** indicates the serial part number of a system. NOTE 5: Hard drives must use an 18-character serial number per 923-3383.
Serial Number of Primary In-Box Item (IN-BOX SN)	This element indicates the serial number of the primary item inside the container. For example: **IN-BOX SN: 703928R+1348NL1234** indicates the serial number of a contained hard-disk drive. **Labels for Fujitsu product must not print: "IN-BOX SN:"**

Data Element	Description of Content/Value
Quantity (QTY)	This element indicates the number of items in the container having the TLA Mfg Part Number. The value is usually 1. For master packs, print on the Type 4 label the quantity of individually packaged units inside. For example: **QTY: 1** for a single spare and **QTY: 8** for an over-boxed set of aftermarket options.
Box Count (BOX X OF N)	This element indicates the count of containers which constitutes the complete item, product or configuration as designated by the TLA Mfg Part Number. For example: **BOX 1 OF 2** would be printed to identify the first of two containers if the engineered system consisted of two separate packages. **Labels for Fujitsu product must print Box Count using format: "Box: X/N"**
'ASSEMBLED IN:...'	Human-Readable Content: This element indicates the official short name, in English, of the country of manufacture as specified in ISO 3166. It is the responsibility of the manufacturer, whether an external supplier or internal factory, to choose the appropriate country name in accordance with the rules and regulations in effect where and when the product is manufactured. For example: **ASSEMBLED IN: UNITED STATES** For kits having significant content of varying countries of origin print **ASSEMBLED IN: MIXED** and include a Type 5 label that shows the origin of the significant, separate components. Bar Code: Use the two-character country code (ISO 3166-1-alpha-2 code) per ISO 3166. It is the responsibility of the manufacturer, whether an external supplier or internal factory, to encode the appropriate country code corresponding to the country name printed in human-readable characters. For example: *US* is encoded to indicate the United States. For kits that contain multiple significant components of differing origin, concatenate the identifiers. For example, a kit with content from the Malaysia, Japan and Mexico would contain this value in the bar code: *MYMXJP*

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HDD Configuration Code (CONFIG)	This element indicates the level of firmware and major components of a hard-disk drive. The value is assigned by Oracle or the drive manufacturer. For example: **CONFIG: 25** **Labels for Fujitsu product must not print: "Config:"**
Firmware Version (FW)	This element indicates the level of firmware on a solid-state drive (SSD) or other type of assembly. It is required on SSDs. For example: **FW: A087** **Labels for Fujitsu product must not print: "FW:"**
Vendor Code Name (VENDOR)	This element indicates a coded vendor name plus a location code or "REM". Remanufacturing vendors derive the code by concatenating a three-character abbreviation of the vendor name with "-REM". Repair vendors concatenate a three-character abbreviation of their name with a three-character abbreviation of the city or location where the repair work is performed. For example **VENDOR: AUR-REM** could be used to identify that an assembly was remanufactured by Aurora Inc; and **VENDOR: FIX-CUP** could be used to identify that an assembly was repaired by Fix It Inc. in its facility located in Cupertino, California. **Labels for Fujitsu product must not print: "VENDOR"**

Data Element	Description of Content/Value
Vendor Number (VN)	This element indicates the numeric code, assigned by Oracle, that uniquely identifies a supplier or supplier's operating unit. It is a two- to six-digit number stored in FUSION. For example: **VN: 464970** Except for remanufacturing, internal manufacturing sites use the name of their FUSION organization (org). For example: **VN: HLS** is the code used by the internal factory in Hillsboro, Oregon. **Labels for Fujitsu product must not print: "VN:"** NOTE 6: Spare and after-market kits of Dual Inline Memory Modules (DIMMs) must add a suffix of a dash (-) followed by the compressed JEDEC JEP106 manufacturer's ID or Vendor Name per 950-3757-xx, Section 3.3.1. Print only the hexadecimal characters of the 2-byte value. For example, the Supplier Code for a kit of Hynix DIMMs packaged by Mitac would be *465765-00AD*.
Date of Manufacture (DOM (NSX))	This element indicates the original date of manufacture. Except for hard-disk drives and batteries, it identifies the date on which manufacturing is completed and the item is packaged as a finished good. Hard-disk drives must use the date extracted from the serial number. Batteries must use the date the battery itself was manufactured so that the expiration and/or recharge date can be calculated properly. The date of manufacture is required to be shown in the form of *YYYY-MM-DD* or *YYYY-MM.* Refer to ISO 8601. The original date of manufacture is required on all new items and on reworked, repaired and remanufactured items of the following kinds: power distribution unit, power supply, hard-disk drive, solid-state drive, DVD drive, tape drive, battery and battery pack. For example: **DOM (NSX): 2014-02-27** indicates a date of manufacture of February 27, 2014

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	Labels for Fujitsu product must print format: "DD/MM/YYYY". NOTE 7: Packaged hard-disk drives and batteries must use DOM (NSX): YYYY-MM indicating the date of manufacture of the drive or battery. DOM (NSX) for hard-disk drives is calculated from the 9th through 12th characters of a type S4, S5, or S6 18-character serial number as defined in Section 2 of 923-3383.
Date of Repair or Rework (SVD)	This element indicates the date an item is repaired or reworked. This element applies to all FRUs that contain, or are derived from, used parts even if the item contains some new parts. The date is required to be shown in the form *YYYY-MM-DD* or *YYYY-MM*. Refer to ISO 8601. For example: **SVD: 2014-08-14** for a repaired or reworked product packaged on August 14, 2014. **Labels for Fujitsu product must not print: "SVD"**.
Date of Remanufacture (RMD)	This element indicates the date an item is remanufactured. This element applies to all systems, FRUs and X-options that contain, or are derived from, used parts even if the item contains some new parts or it is newly reconfigured. The date is required to be shown in the form *YYYY-MM-DD* or *YYYY-MM*. Refer to ISO 8601. For example: **RMD: 2014-08-14** for a remanufactured product packaged on August 14, 2014. **Labels for Fujitsu product must not print: "RMD"**.
CE/UKCA Marks	CE/UKCA marks are required on all labels Jan.1 2023. View samples and artwork in Appendix A
Packaging Material Composition Marks	Packaging materials marks are required on all labels. This allows for 'generic' box use.
ORACLE Branding on Labels	All ORACLE **FRUs** require Oracle branding (NAME) be printed at TOP of package labels. **Oracle Branding is NOT to be used for RACK or SERVER** labeling. View samples and artwork in Appendix A. **Labels for Fujitsu product must not contain Oracle Branding on labels.**

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7 PRINTED CONTENT OF IDENTIFICATION LABELS

The printed content on a label is based upon the current bill of material and item attribution within Oracle's business systems. Printed content on a label may change as a result of any of the following:

- Changes to item attribution within Oracle's business systems such as FUSION.
- Changes to contracts and agreements
- Changes in local laws and regulations
- Relocation of the manufacturing operations
- Engineering changes to product specifications or Oracle's bills of material
- Changes to Oracle's orderable (marketing) part numbers
- Changes to serial-control policies

If a data element. like the Date of Manufacture or Serial Number, is already printed and readily identifiable on a supplier label, it does not need to be duplicated on the Oracle finished-goods label.

7.1 Data Elements and Data Values

Print the data elements on the labels in human-readable and bar-coded characters as indicated in *Table 7-1*. Print *Orderable Part Number(s)* at the top of the label followed by the (Oracle) *TLA Manufacturing Part Number*. Two or more rows may be used to list all applicable Oracle orderable (marketing) part numbers. Recommended placement of elements is shown in the label examples in *Appendix A*. If no example is shown, place elements as needed to fit label stock.

NOTE 8: Do not abbreviate or truncate any data values whether they are shown in human-readable characters or encoded in bar codes.

If an optional or conditional element is not printed, print the next element without additional space. For consistency of labels produced by a supplier, conditional elements may be optionally printed even if requiring conditions do not apply.

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7.2 Data Identifiers

Data Identifiers are not to be used in Bar-Coded or Human-Readable Elements.

7.3 Bar Code Printing Locations

If an element is bar-coded, the bar code must be printed directly below or to the right of the human-readable information. Except for 'ASSEMBLED IN...', all bar codes must contain the full and identical value that is shown in human-readable characters. See *Table 6-1* to determine what values are encoded in the bar code of the 'ASSEMBLED IN...' element.

> NOTE 9: Data Identifiers are *not* considered part of the value of a data element. Data Identifiers must not be included in the values that are electronically transmitted to Oracle. For example, the Data Identifier 'P' must not be included in the value of the Oracle TLA Mfg Part Number when provided to Oracle in an Advanced Shipment Notice (ASN).

7.4 Items Shipping in Multiple Containers

A single configured product, bundle or upgrade can ship in multiple separate containers. When it does, the labels on each of the related containers must all show the same Orderable Part Number(s), TLA Mfg Part Number, and Serial Number. The separate containers may optionally be marked with the Part Number of the Primary In-Box Item.

Box count will vary depending upon the number of containers used to ship the complete configuration, bundle or upgrade. The container holding the main system, chassis or rack must be marked as BOX 1 OF *n*.

7.5 Marking 'ASSEMBLED IN: ...'

Each container must be evaluated individually based upon local laws and regulations to determine the appropriate 'ASSEMBLED IN...' marking. When separate, significant components within a single container originate from multiple countries, the origins must be explicitly stated by using a Type 5 label in addition to a Type 1, 2, 3, 4 or 6 label.

7.6 Multiple Separate Serialized Items

When more than one of the same serialized Hardware Finished Goods Buy, Hardware Finished Goods Make or ATO Config Item is contained within a single container or overbox, apply a Type 5 label. A Type 4 label is also required, or the content of a Type 5 label can be added to a Type 4 label.

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NOTE 10: The Type 6 label *only* applies to containers that have more than one of the same TLA Mfg Part Number. Therefore, this label type does not apply to individual kits of items like DIMMs because the top-level part number — such as 594-xxxx-xx, 595-xxxx-xx, or Fxxx-xxxx-xx — is a quantity of one on the marketing BOM and on the

7.6 Label Physical Size Requirements

Standard required packout label sizes are: 4" x 2", 4" x 4" for FRUs, and 4" x 6" for Servers and Racks

4" x 6" labels/format must be used for RACK and SERVER labeling. FRUs and XOPT parts may use either of the two smaller sizes, with the 4" x 4" as preference due to amount of content. Requirement is all constant content meets artwork design guidelines/sizes. Variable printed content must fit neatly/clearly on label with clear margins/spacing and adequate 'quiet area' for barcodes.

8 MATERIAL REQUIREMENTS AND TESTING PROCEDURES

8.1 Material and Adhesive

The label must be a white paper stock. It must remain adhered and meet the print quality requirements for a period of 6 months under the following storage and transportation conditions:

- temperatures from -40°C to 85°C
- humidity up to 90%
- normal levels of artificial light and sunlight

In accordance with global restrictions on hazardous substances, all materials which comprise the label, adhesive, and ink must be compliant with *914-1742, Global Supplier Engineering: Environmental Specification - Product Compliance*. For more information refer to *990-1237, Corp: Restriction of Hazardous Substances (RoHS) Compliance and Declaration Policy*. Even individual labels which do not have an Oracle part number, or which are a part of a set of labels, must adhere to these policies and specifications.

8.2 Testing

Labels must meet the requirements of Annex A of EIA-556-B. These requirements and tests are intended to ensure that labels and marks can withstand extended long-term exposure to a variety of indoor environments, remain affixed to products, and are readable and scannable for the intended life of the product.

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9 PLACEMENT OF LABELS ON THE SHIPPING CONTAINER

Align the top of the identification label with the registration marks on the container. If no marks exist, or the label will not fit there, place the label as follows:

- in the upper right corner of a width panel
- on a side that is externally visible if palletized.
- aligned with the top and right edges of the container
- spaced within 1.0 inch (25 mm) from edges
- with less than 0.25 inch skew across the top edge
- not covering any container graphics, handling symbols, or other labels

For containers 2 to 4 inches in height, and a 4x4 FRU label is used, place top edge of label at top edge of container, and wrap excess to bottom of container. This will allow PN to be easily viewed when containers are stacked.

For small container less than 2 inches in height, place the label instead on the top of the container in a corner so that it will not cover an pre-printed logos or other information.

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Appendix A Label Examples - Oracle

Table Appendix A ORACLE Printed Label Content

Key R=Required N=None/No C=Conditional O=Optional							
Data Element	**Human Readable**	**Human Readable**					**Barcoded**
	Identifier	**Type 1**	**Type 2**	**Type 3**	**Type 4**	**Type 5**	
		4x4	**4x2**	**4x6**	**Multiple**	**Multiple**	
		FRU	**FRU**	**Servers Racks**	**Origin**	**SNs**	
Oracle Logo	**ORACLE**	**R**	**R**	**N**	**N**	**N**	**N**
Orderable MKT# PN		**R**	**R**	**R**			**N**
Manufacturing PN	**MFG. PN:**	**C8**	**C8**	**C8**	**N**	**O**	**R**
In Box PN	**IN-BOX PN:**	**R-C7**	**R-C7**	**R**	**R-C7**	**R-C7**	**R**
Serial Number	**SN:**	**O**	**O**	**R**			**O /O / R**
In Box SN	**IN-BOX SN:**	**C1 / C2**	**C1 / C2**	**C1 / C2**	**R**	**R**	**R**
Firmware Revision	**FX:**	**C9**	**C9**				**R**
Quantity	**QTY:**	**R**	**R**	**O**	**R**	**O**	**R /R/ O / R / O**
Box Count	**BOX _ OF _**	**O**	**O**	**N**		**O**	**N**
Vendor Number	**VN:**	**R**	**R**	**R**	**R**	**N**	**N**
Vendor PN	**VENDOR PN:**	**O**	**O**	**O**	**O**	**O**	**N**
Assembled In	**ASSEMBLED IN:**	**R**	**R**	**R**	**R**		**N**
Oracle Purchase Order #	**CUST PO:**	**O**	**O**	**O**	**O**	**O**	**O**
Date of Manufacture	**DOM (NSX):**	**R C5/C6**	**R C5/C6**	**R C5/C6**			**N**
Date of remanufacture	**RMD:**	**C4**	**C4**	**C4**			**N**
Date of Repair/Rework	**SVD:**	**C3**	**C3**	**C3**			**N**
CE/UKCA		**R**	**R**	**R**			**N**
Material ID Marks		**R**	**R**	**R**			**N**

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Table Appendix A, Cont.

Conditional:

C1- One or more packaged items has a serial number.
C2- The serial number on the primary item inside the container is different from the serial number of the packaged assembly
C3- The item inside the container has been reworked or repaired.

C4- The item inside the container has been remanufactured.

C5- The item inside the container is newly manufactured

C6- The item inside the container has been reworked, repaired or remanufactured and is of one following kinds: power distribution unit, power supply, hard-disk drive, solid-state drive, DVD drive, tape drive, battery and battery pack.
C7- IN-BOX PN must reflect labeling on physical part. Use Oracle PN if applied. if not, use Vendor PN
C8- Required if Oracle PN is not on physical part and vendor PN is used for In-Box PN. This the stocking OPN of the physical part.
C9- For all flash accelerator card and SSD (all form factors, including M.2) FRU's, the FRU box label needs to include the **FW revision** that the component ships from the EM with.

If a field does not contain information, leave space BLANK, without Identifier and content.

The Artwork for ORACLE product labeling are part numbers 8215902 and 8215903.

CE/UK, and Materials Marks required content in table above, must be printed on all labels per artwork. Artwork contains different label content for Corrugated Fiber Board and Poly Envelope Mailers, and must be properly selected specific to packaging material type. Bottom right logo mark in indicator. CFB = Corrugated Fiber Board (cardboard) and LDPE = Polyethylene.

Oracle Logo is required to be printed on all FRU packaging labels, 4"x 2" or "4"x 4".

Oracle Logo must NOT be printed on Server or Rack 4"x 6" Packout Labels.

Label Examples

The following examples are intended to visually represent the requirements in this specification. They are not intended to be reproductions of any real labels. The printed content is defined by the requirements in *Table Appendix A.* Individual data elements and their corresponding data identifiers may differ and are defined in *Table 6-1.* Label sizes are recommended. Sizes may be adjusted larger to accommodate required elements.

Type **1**

Package Material = Corrugated Fiber Board

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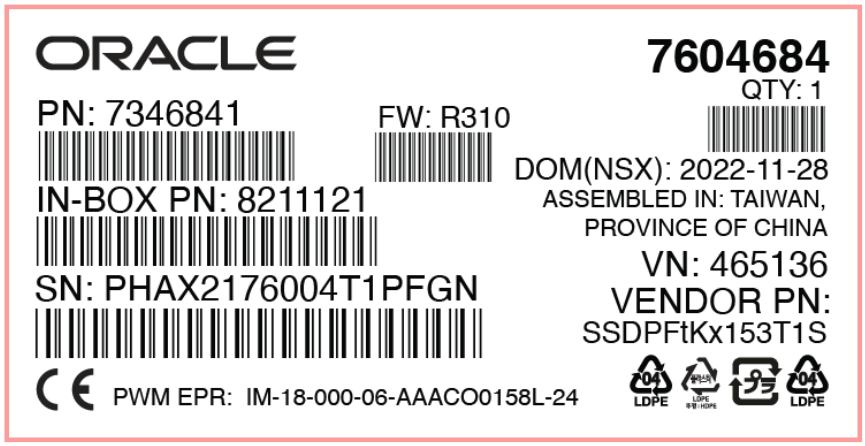
Type 2



Package Material = Polyethylene Mailer

Type 3

Package Material = Corrugated Fiber Board

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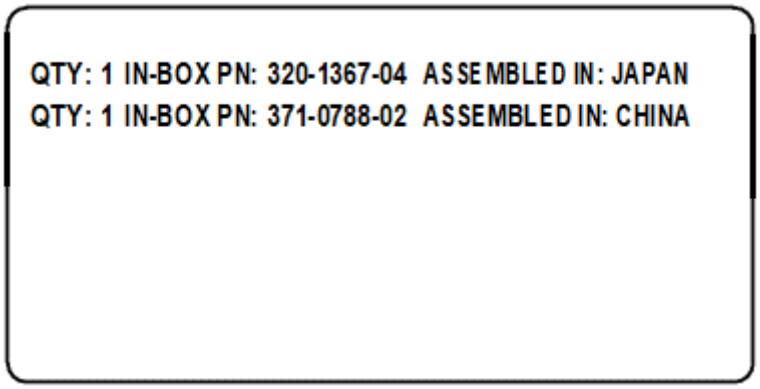
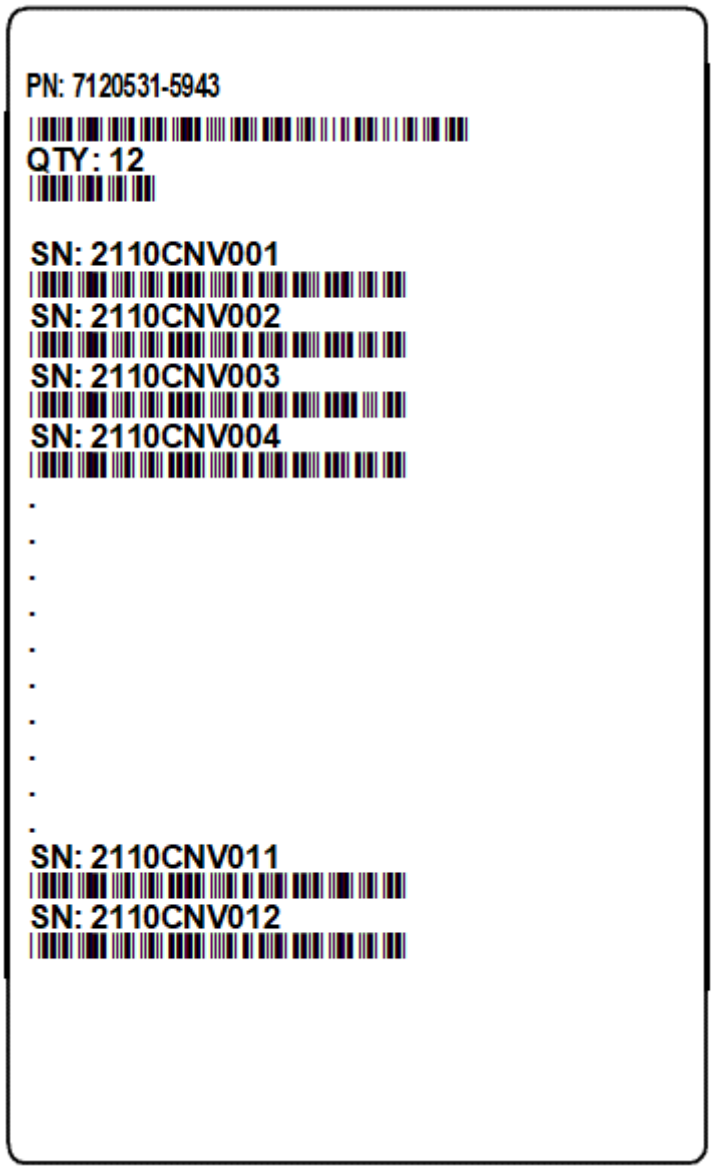
Type 4



Type 5



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Appendix B Label Examples - Fujitsu

Table Appendix B Fujitsu Printed Label Content

Key: R = required elements, C-x = conditional elements, O = optional elements

Data Element	Human-Readable Identifier	Human-Readable Content by Label Type						Bar Code if human-readable printed	Optional Data Identifier
		Type 1 ≥ 4"x4" PTO	Type 2 ≥ 4"x4" ATO	Type 3 ≥ 3"x2" PTO	Type 4 Master Pack	Type 5 Multi-Origin	Type 6 Serial Nos.		
Oracle Logo		O	O	O	O				
Orderable Part Number(s)		R*	R	R*	R				
TLA Mfg Part Number	**PN:** or **Oracle® PN:**	R	R	R	R		O		(NONE)
Fujitsu Mfg Part Number	**Fujitsu PN:**	C-1		C-1	C-1				
Fujitsu Part Revision	**Rev:**	C-1		C-1	C-1				
Serial Number	**SN:**	C-2	R	C-2			R	R	(NONE)
Box Count	**Box: _ / _**	O	R	O					
"ASSEMBLED IN: ..."	**ASSEMBLED IN:**	R	R	R	R	R		R	(NONE)
Date of Manufacture	**DOM(NSX):**	C-3,4	C-3,4	C-3,4	O				
Item Description, CE Mark		O	O	O	O	O	O		

As indicated in *Table Appendix B (*above), the Data Element is conditionally required when:

C-1. the assembly is included in partner agreements with Fujitsu and a *Fujitsu Manufacturing Part Number* is assigned to it.

C-2. one or more packaged items has a serial number.

C-3. the item inside the container is newly manufactured.

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C-4. the item inside the container has been reworked, repaired or remanufactured and is of one following kinds: power distribution unit, power supply, hard-disk drive, solid-state drive, DVD drive, tape drive, battery and battery pack.

Label Examples

The following examples are intended to visually represent the requirements in this specification. They are not intended to be reproductions of any real labels. The printed content is defined by the requirements in *Table Appendix B.* Individual data elements and their corresponding data identifiers may differ and are defined in Table 6-1.

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3. Packaging label

3.1. System

	M10-1 / M10-4 / M10-4S / M12-1 / M12-2 / M12-2S / PCI Expansion Box / Expansion Rack (with XB-Box)	
Packaging label for System	For Oracle < Sample : M10-4 > (size 144×100 ㎜)	For Fujitsu < Sample : M10-4 > (size 144×100 ㎜)
	【NOTE】	

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3.2. X-option

	M10-1 / M10-4 / M10-4S / M12-1 / M12-2 / M12-2S / PCI Expansion Box / Expansion Rack (with XB-Box)	
Packaging label for X-option	For Oracle DIMM (For 4x DIMM)	For Fujitsu DIMM (For 4x DIMM): Same as for Oracle DIMM (For 8x DIMM)
	 (size 144×100 ㎜)	 (size 144×100 ㎜)
	For Oracle / For Fujitsu HDD / CMB etc. < Sample : HDD > (size 144×100 ㎜)	
	【NOTE】	

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3.3. FRU

<table>
<tr><td></td><td colspan="2">M10-1 / M10-4 / M10-4S / M12-1 / M12-2 / M12-2S / PCI Expansion Box /
Expansion Rack (with XB-Box)</td></tr>
<tr><td>Packaging
label
for FRU</td><td>For Oracle

CMB / PSUBP / XBU etc.

< Sample : CMB >

(size 144×100 ㎜)</td><td>For Fujitsu

CMB / PSUBP / XBU etc.

< Sample : CMB >

(size 144×100 ㎜)</td></tr>
<tr><td colspan="2">【NOTE】</td></tr>
</table>

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Appendix C Exempted Product from Use of Specification

Product	Date	Reason
Oracle Health (Cerner)	8/13/24	Off the shelf labeling and multiple existing suppliers. Current labeling examples below:

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Document History

The names of approvers and reviewers can be found by ECO number in Fusion.

Rev	ECO No.	Description of Change	Date
		Revisions Prior to 2014 show on Rev TD document	1992-01-21
TC	E0023056	1. Eliminated use of Data Identifier 'S' in the bar codes of the Serial Number. 2. Made all other Data Identifiers optional. 3. In Table 5-1, changed the minimum character height of the Orderable Part Number printed on Type 3, 4, 5 and 6 labels. 4. In Table 5-3, changed the minimum wide-to-narrow ratio of a Code 39 barcode from 2.4:1 to 2.0:1. 5. Rewrote Section 7. 6. Combined Tables 7-1 through 7-6, added a Human-Readable Identifier column, and deleted Placement column. 7. In Section 7.1, added requirement that Orderable Part Number(s) and Manufacturing Part Numbers must be printed at the top of the label in that order. Placement of other elements is per label examples or best fit. 8. Added allowance, in Section 7.1, stating that for consistency of labels produced by a single supplier conditional elements may be optionally printed even if conditions do not apply. 9. Changed data element name "Date of Repair" to "Date of Repair or Rework". 10. Changed the element name "Service Item Part Number" to "Part Number of Primary In-Box Item". 11. Changed data element name "ASSEMBLED IN: XXXXXXX" to "ASSEMBLED IN:..." 12. In Table 6-1: •added "Date of Remanufacture" as a new data element. •added "Vendor Code Name" as a new data element. •added "Serial Number of Primary In-Box Item" as a new data element. •moved Human-Readable Identifier and Data Identifier columns to Table 7-1. •revised descriptions of "Part Number of Primary In-Box Item" and "ASSEMBLED IN: ..." data elements. •edited the descriptions of most other data elements for consistency and clarity. 13. In Tables 7-1: •made "Universal Product Code" a required element on Type 4 labels when the product team assigns a UPC number to a master pack. •made "ORACLE PN:" an optional human-readable identifier of the TLA Mfg Part Number. •made "ORACLE SN:" an optional human-readable identifier of the Serial Number. •made "Part Number of Primary In-Box Item" a required element on Type 1 and 3 labels when the "TLA Mfg Part Number" is assigned a Part Type of 'FRU' in Oracle's FUSION.	2014-08-21

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		•made "Part Number of Primary In-Box Item" a required element on Type 5 labels and an optional element on Type 2 and 4 labels. •made "Work Order Number" an additional optional element on Type 1, 3 and 4 labels. •made "Oracle's Customer Sales Order Number" a required element on Type 4 labels if not on a shipping label and an optional element on Type 1 and 2 labels. •made "Oracle Purchase Order Number" a required element on Type 4 labels if not on a shipping label and an optional element on Type 1 and 2 labels. •made "Serial Number of Primary In-Box Item" a required element on Type 1, 2 and 3 labels when the serial number on the primary item inside the container is different from the serial number of the packaged assembly. •made "Quantity" an optional element on Type 2 labels. •made "Box Count" an optional element on Type 1 and 3 labels. •made "Vendor Code Name" required on Type 1, 2, 3 and 4 labels when the item inside the container has been reworked, repaired or remanufactured. •made (original) "Date of Manufacture" a required element on reworked, repaired or remanufactured items of the following kinds: power distribution unit, power supply, hard-disk drive, solid-state drive, DVD drive, tape drive, battery and battery pack. •made "Date of Repair or Rework" a required element on Type 2 labels when when the item inside the container has been reworked or repaired. •made "Date of Remanufacture" a required element on Type 1, 2 and 3 labels when the item inside the container has been remanufactured. and as an optional element on Type 4. Made this element optional on Type 4 labels. •made "Item Description or Notes" an optional element on Type 1, 2, 4, 5 and 6 labels. 14. Made minor editorial changes and spelling corrections throughout. 15. Updated examples to remove all data identifiers from bar codes and human-readable identifiers.	
TD	E0034921	1. In Tables 6-1 and 7-1, changed the identifier for the Date of Manufacture from *DOM* to *DOM (NSX)* to meet Vietnam regulations. Update all example labels accordingly in Appendix A. 2. Updated definition of Universal Product Code in Table 6-1 and removed references to *923-3308, WWOPS Technology: Creating Universal Product Codes (UPC)*. 3. Added Firmware Version (FW) as a new data element to Tables 6-1 and 7-1. It is a required element on packaged solid-state drives. 4. Within Tables 6-1 and 7-1, made Vendor Part Number (VENDOR PN) a required element on packaged solid-state drives. 5. Added example Type 3 label of a packaged solid-state drive to page 30.	2017-05-25
TE	E57024	1. Updated Label sample in Appendix to pictures from text. 2. Updated references from GSI to FUSION. 3. Updated reference to Beehive folder to Supplier Portal. 4. Converted to current corporate template.	2022-1-25

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TF	E58045	Updates to Overview, Key requirements testing, Objective, HDD Reporting, and Testing. Adding requirement for UL/CE marks, Packaging materials marks, and Oracle Branding per Oracle Artwork.	2022-14-11
TG	E58601	Added Cust PO row. Updated sample drawings to blank a barcode shown. Updates to Appendix A table, correcting some PRINTED characters to uppercase and punctuation. Corrections to table on page 13 and update to SCOPE. section 2, were made.	2023-12-01
TH	E62973	Added products exempted from standard, Appendix C	2024-08-13
TI	E64091	Updated Type 1 label format sample and Appendix A requirements	2025-02-11
TJ	E65263	Remove UKCA Mark, add requirement for India PWM EPR Number	2025-08-08

Reference Documents

DOCUMENT TITLE	
Global Supplier Engineering: Environmental Specification - Product Compliance	914-1742
WWOPS Quality: Specification of Bar-coded Identification Labels for Packaged Raw and Semi-Finished Materials	917-1335
WWOPS Global Supplier Management: Embedded Logic in Serial Numbers, Lot Codes, and Assembly Identifications (IDs)	923-3383
Corporate FRU ID: SEEPROM Programming Overview and Procedures for FRU Vendor	950-3757-02
Identification, Labeling and Bar-coding Standards for Assemblies	950-4477-03
APL Part Number Matrix Disk Drives	950-5871-08
Corp: Restriction of Hazardous Substances (RoHS) Compliance and Declaration Policy	990-1237
Corp: Part Number, Revision, and Interchangeability Conventions for Orderable and Manufacturing Items	990-1241
WWOPS ESO: Reviewing Change Orders	7337255

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