

Packaging and Labeling Reference Manual

Guidelines and standards for product packaging and labeling

Pushing innovation to create intelligent
power and sensing technologies that solve
the most challenging customer problems.



[onsemi.com](https://www.onsemi.com)

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Purpose and Scope

- This document outlines the packaging and labeling guidelines as **onsemi** transitions to new corporate logo. The rebranding on packing primarily affecting **onsemi** logo currently on intermediate boxes, labels and some documents.
- New **onsemi** logo will replace the current ON Semi-conductor logo and will be implemented in phases starting Q3 2021 and continuing into 2023.
- There will be an extended transitional period when some inventories with old logo may experience slower depletion rate.
- This document illustrates any minor differences in format or content.



Definitions

- MPN Label:** A bar code label containing the **onsemi** Manufacturer Part Number and Internal Part Number (IPN) of the device and other traceability information. Label dimensions are 1.625" x 4.9" (41.3 mm X 124.5 mm).
- CPN Label:** A bar code label containing the Customer Part Number of the device and other traceability information. Label dimensions are 1.625" x 4.9" (41.3 mm X 124.5 mm).
- Intermediate Box:** The box that houses the reel(s), tray(s) or tube(s) containing product. Each Intermediate Box will have an MPN Label and a CPN Label when required.
- Shipping Label:** A bar coded label used to identify the contents of a shipping container. This also contains a "ship to" name and address. Label dimensions are 4.5" X 6.5" (114.3 mm X 165.1 mm).
- Overpack Box (OBLPN):** The box that contains one or more Intermediate Boxes. Each Overpack box will have a Shipping Label.

Labels

MPN Label

Each Intermediate Box will have a standard **onsemi** MPN Label. The label consists of the following elements:

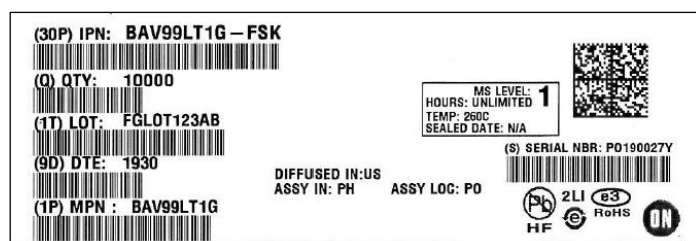
Field Name	Description
(30P) IPN *	Internal Part Number
(Q) QTY *	Quantity in container
(1T) LOT *	Lot Number (maximum of 10 alphanumeric characters)
(9D) DTE *	Date Code(s) in "YYWW" format ("YY" denotes 2-digit year and "WW" denotes 2-digit work week; maximum of 2 date codes denoted as "YYWWYYWW") **
(1P) MPN *	Manufacturer Part Number
ASSY LOC	Assembly Location Code (Internal to onsemi)
(S) SERIAL NBR *	Internal to onsemi
(4L) ASSY IN	Country of Assembly – 2-digit ISO code of the assembly country
(26L) DIFFUSED IN	2-digit ISO country code of the Diffused In site
MS LEVEL	Moisture Sensitivity Level
HOURS	Time period the product can be exposed to ambient room conditions
TEMP	Maximum operating temperature of the product
SEALED DATE	Date when the moisture barrier bag is sealed
HF	Halide Free Logo - Indicates if material is Halide Free
RoHS	RoHS logo - Indicates if material complies with Europe RoHS
	Pb Free logo - Indicates if the material is Lead Free
2LI e category	Indicates type of second level interconnect plating
	China RoHS logo - Indicates if material complies with China RoHS

* Barcoded fields.

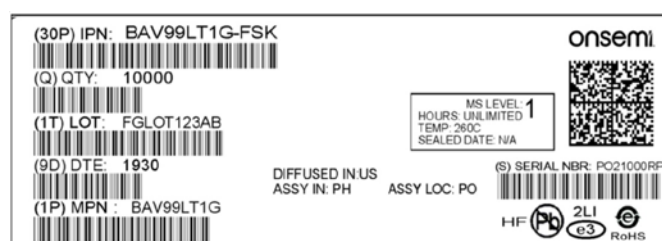
** Exception Process for Double Date Code: If the intermediate box requires a split in the GDC, the new box will only carry the newest date code moving forward – newer date code is the predominant date code in the lot. Primary containers (reels) will carry original double date code indication.

2D Barcode definition and output:

Header	Data Stream	Trailer
[]	>«RS»06«GS»1PMPN«GS»1TLOT«GS»9DDTE«GS»QTTY«GS»4LASSYIN«GS»SSERIALNBR«GS»30IPN«GS»26LDIFFUSEDIN«RS»«EOT»	
[]	>«RS»06«GS»1PBAV99LT1G«GS»1TFGLT123AB«GS»9D1930«GS»Q10000«GS»4LPH«GS»SP0190027Y«GS»30PBAV99LT1G-FSK«GS»26LUS«RS»«EOT»	



Before



After

Sample of an MPN Label (not to scale) for all orderable finished good parts with product classes: Finished Goods, Modules, Chip/Die Sales, Die for Sale as Wafer, and Wafer for External Sale:

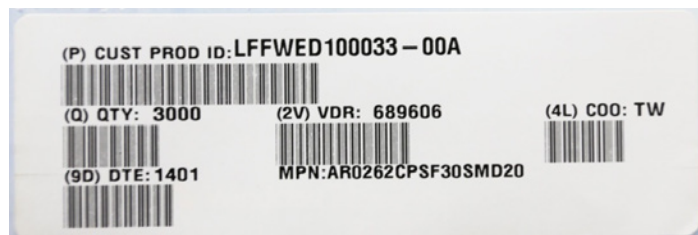
CPN Label

Many customers have custom CPN labels; the following reflects only our standard CPN label.

Intermediate Box will have a standard **onsemi** CPN Label when applicable. The label consists of the following elements:

Field Name	Description
(P) CUST PROD ID*	Customer Part Number
(Q) QTY*	Quantity in container
(9D) DTE*	Date Code(s) in "YYWW" format ("YY" denotes 2-digit year and "WW" denotes 2-digit work week; maximum of 2 date codes denoted as "YYWWYYWW")
(2V) VDR*	Vendor code
MPN	Manufacturer Part Number
(4L) COO*	Country Of Origin

* Barcoded fields.



Sample of an CPN Label (not to scale)

Shipping Label

Each Overpack will have a standard **onsemi** shipping label. The label consists of the following elements:

Field Name	Description
FROM	onsemi return address
SHIP TO	Customer Name and Address
MPN	Manufacturer Part Number
FO	Factory Order Number; Line item; Factory Order Sub Job
(3S) PKG ID *	onsemi UCC code, unique carton identifier number and three digit package number
(K) TRANS ID *	Purchase Order Number
(P) CUSTOMER PROD ID *	Customer Part Number
(Q) Quantity *	Package Quantity
(13Q) Package Count *	Which package out of the total number of packages in the shipment
(S) Serial # *	Unique Carton Identifier
COO ASSY	Country of Assembly
HF	Halide Free Logo - Indicates if material is Halide Free
RoHS	RoHS logo - Indicates if material complies with Europe RoHS
Pb	Pb Free logo - Indicates if the material is Lead Free
2LI e category	Indicates type of second level interconnect plating
Pickref *	Unique Order Identifier
(20L) CUST5 *	Customer Code
(6L) CONSOL *	Shipment Consolidation Code
FACT EPSD:	Factory Earliest Possible Ship Date
D/C EPSD	Distribution Center Earliest Possible Ship Date

Internal Use

FROM:		SHIP TO:	
MPN: FPF3788UCK FO: 2648VY 11 A01			
(3S) PKG ID: AFAKDAH8W001			
(K) TRANS ID: 5313018085			
(P) CUSTOMER PROD ID: 1203 - 009080			
(Q) QUANTITY: 12000		2LI 	
(13Q) PACKAGE COUNT: 1/2		COO ASSY: PH HF	
(S) SERIAL #: XDAH8W01		(20L) CUST5: \$SUNX	
PICKREF: DAHY8W		(6L) CONSOL: PSGJIT	
FACT EPSD: 07JAN21 D/C EPSD: 10JAN21			

onsemi Internal Use Only













Sample of a Shipping Label (not to scale)

Packing List & Certificate of Compliance

The Overpack box will contain a packing list detailing the contents of all Overpack boxes of an order. The Packing List contains **onsemi** standard Certificate of Compliance. The label consists of the following elements:

	Field Name	Description
Text	Ship From	onsemi Return Address
	Ship To	Customer's Name and Address
	Bill To	Customer's Billing Address
	End Customer PO No.	Issuing Customer purchase order number
	PO Item	Purchase Order line item
	Request Date	Customer Required Date
	Promise Date	Planned delivery date
	Payment Terms	Payment Terms
	Incoterms	Freight shipping terms (who pays for the freight)
	Package #	Shipment package number
	Lot Number	Product manufacturing lot number
	Quantity	Manufacturing lot quantity
	Date Code	Manufacturing Dates *
	Assembly Location	Manufacturing Location
	Die Origin	Die Fabrication Location
	Revision	Human readable customer revision number
	Product Description	Product Description
Barcode and Text	HTSUS	Harmonized Tariff Number
	ECCN	Export Commodity Control Number
	Customer Code	onsemi designated customer identifier
	(2V) Vendor ID	onsemi UCC number or Customer assigned Vendor Code
	(11K) Packing List	Packing List number
	(4S) Package ID	Vendor ID and packing list number
	(K) Transit ID	Customer's purchase order number
	(P) Customer Prod ID	Customer Part Number
	(1P) Market Part Number	onsemi Part Number
	(Z) Parcels	Total box count
	(2Q) Total Weight in KG	Total package weight of shipment in kilograms (weight in pounds listed above kg)
	(Q) Qty This Shipment	Package Quantity

* Exception Process for Double Date Code: If the intermediate box requires a split in the GDC, the new box will only carry the newest date code moving forward – newer date code is the predominant date code in the lot. Primary containers (reels) will carry original double date code indication.

S H I P F R O M S C I, LLC (Attn:D-Dock Returns) 5005 E. McDowell Road Phoenix AZ 85008 US	 (2V) VENDOR ID: 689606 END CUSTOMER PO NO: PO ITEM: 10	 (11K) PACKING LIST: 1DE7C3 DATE: 14-Oct-2021 PAGE: 1  CUSTOMER CODE: FLIXO																			
S H I P T O 	B I L L T O 	REQUEST DATE: 10-Aug-2021 PROMISE DATE: 29-Nov-2021 PAYMENT TERMS: 90 NET EOM INCO TERMS: FCA LAX HUB																			
(4S) PACKAGE ID: 689606 1DE7C3 		(Z) PARCELS: 1 																			
(K) TRANS ID: 70P158315 		(2Q) TOTAL WEIGHT IN KG: 4.80 																			
(P) CUSTOMER PROD ID: INV-FCS-LP2951CDR2G 		(Q) QTY THIS SHIPMENT: 17500 																			
(1P) MANUFACTURER PART NUMBER: LP2951CDR2G 		HTSUS: 8542.39.0001 ECCN: EAR99																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PACKAGE #</th> <th>LOT NUMBER</th> <th>QUANTITY</th> <th>DATE CODE</th> <th>ASSY LOC</th> <th>DIE ORIGIN</th> </tr> </thead> <tbody> <tr> <td>XPOBA335807</td> <td>RL72941M0H</td> <td>10000</td> <td>2139</td> <td>PHL</td> <td>CZ</td> </tr> <tr> <td>XPOBA335807</td> <td>RL72941M0L</td> <td>7500</td> <td>2139</td> <td>PHL</td> <td>CZ</td> </tr> </tbody> </table>				PACKAGE #	LOT NUMBER	QUANTITY	DATE CODE	ASSY LOC	DIE ORIGIN	XPOBA335807	RL72941M0H	10000	2139	PHL	CZ	XPOBA335807	RL72941M0L	7500	2139	PHL	CZ
PACKAGE #	LOT NUMBER	QUANTITY	DATE CODE	ASSY LOC	DIE ORIGIN																
XPOBA335807	RL72941M0H	10000	2139	PHL	CZ																
XPOBA335807	RL72941M0L	7500	2139	PHL	CZ																
THIS ORDER/SALE LIMITS ACCEPTANCE TO THE TERMS HEREIN AND TO ONSEMI STANDARD TERMS AND CONDITIONS OF SALE AVAILABLE AT WWW.ONSEMI.COM WHICH ARE INCORPORATED HEREIN. ANY ADDITIONAL OR DIFFERENT TERMS PROPOSED BY BUYER ARE REJECTED UNLESS EXPRESSLY AGREED TO IN WRITING.		EXPORT STATEMENT THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.																			
CERTIFICATE OF COMPLIANCE IT IS HEREBY CERTIFIED THAT ALL ARTICLES IN THE QUANTITIES AS CALLED FOR IN THE ABOVE PURCHASE ORDER ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS AND DRAWINGS LISTED ON THAT ORDER WHICH HAVE BEEN ACCEPTED BY ONSEMI IN WRITING. RECORDS SUBSTANTIATING THE ABOVE STATEMENT ARE AVAILABLE IN OUR FILES FOR INSPECTION BY AUTHORIZED PERSONNEL. MARK WASILEWSKI, VICE PRESIDENT, GLOBAL QUALITY AND RELIABILITY		NOTICE OF SUBSEQUENT PURCHASER OR REPACKER SOME OF THE ARTICLES INCLUDED HEREIN ARE IMPORTED AND CAN BE IDENTIFIED BY THE MARKING ON THEIR CONTAINERS INDICATING MANUFACTURE IN COUNTRIES OTHER THAN THE UNITED STATES. THE REQUIREMENTS OF 19 U.S.C. 1304 AND 19 CFR PART 134 PROVIDE THAT THE IMPORTED ARTICLES OR THEIR CONTAINERS MUST BE MARKED IN A CONSPICUOUS PLACE LEGIBLY, INDELIBLY AND PERMANENTLY AS THE NATURE OF THE ARTICLE OR CONTAINER WILL PERMIT, IN SUCH A MANNER AS TO INDICATE TO AN ULTIMATE PURCHASER IN THE UNITED STATES, THE ENGLISH NAME OF THE COUNTRY OF ORIGIN OF THE ARTICLE.																			

CERTIFICATE OF COMPLIANCE

IT IS HEREBY CERTIFIED THAT ALL ARTICLES IN THE QUANTITIES AS CALLED FOR IN THE ABOVE PURCHASE ORDER ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS AND DRAWINGS LISTED ON THAT ORDER WHICH HAVE BEEN ACCEPTED BY **ONSEMI** IN WRITING. RECORDS SUBSTANTIATING THE ABOVE STATEMENT ARE AVAILABLE IN OUR FILES FOR INSPECTION BY AUTHORIZED PERSONNEL.

MARK WASILEWSKI, VICE PRESIDENT, GLOBAL QUALITY AND RELIABILITY

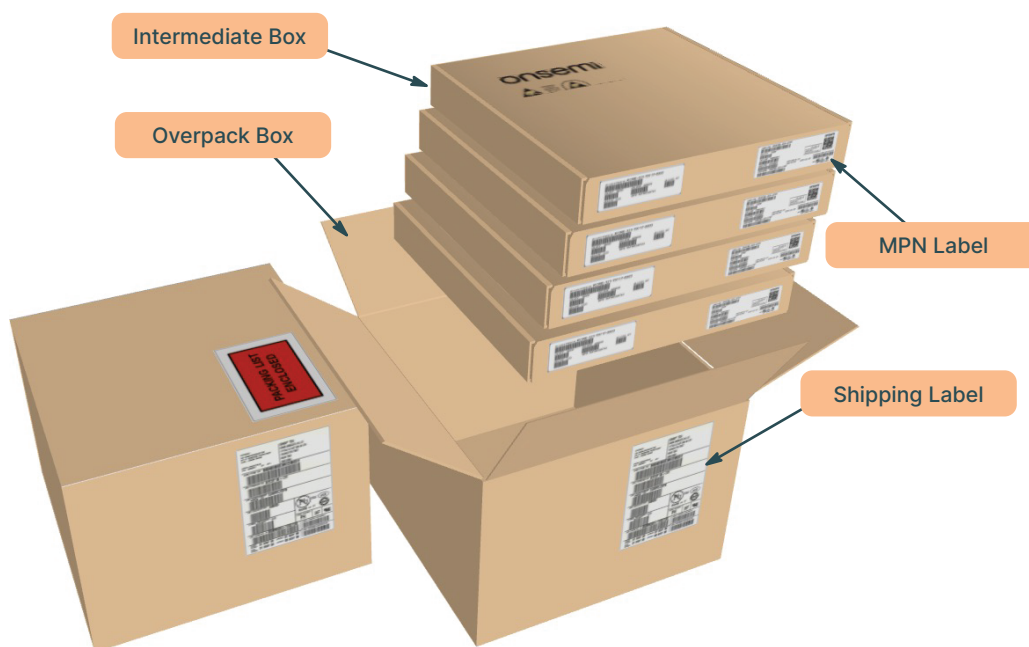
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Sample of a Packing List (not to scale)

Packaging and Graphics

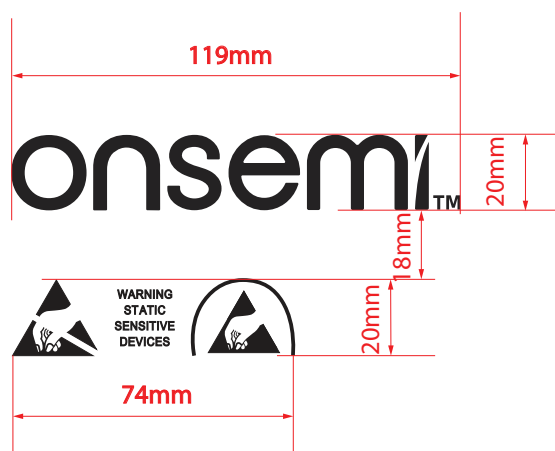
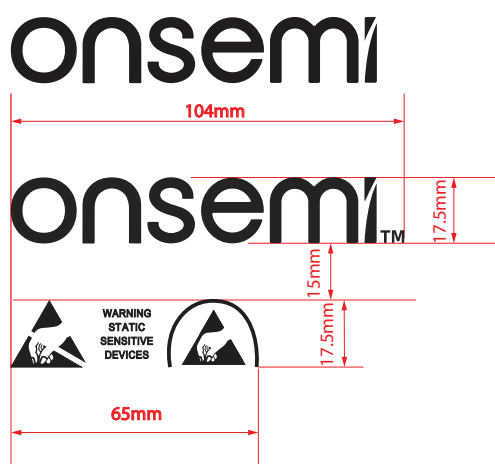
Shipments from **onsemi** will follow company's standard packaging process. The Overpack box may contain multiple Intermediate boxes of a single product. For each line item on an order that is shipped, there will be at least one overpack box [more if the quantity of intermediate boxes exceeds the capacity of the overpack box]. Any overpack box will contain one and only one part number, but may contain varying lots and date codes based on the content of the Intermediate Boxes.



The following pages show samples of **onsemi** Intermediate Boxes showing rebranded Graphics.

The onsemi Logo

The new **onsemi** logo may be seen with or without a "TM" next to the logo. Effective May 15, 2022, all newly printed boxes will include the "TM." In the future, once the **onsemi** logo becomes a registered trademark, the logo will be seen with a circle-R (®) rather than a "TM." This document will be updated when that change occurs.



Tape-and-Reel 13" Packaging and Labeling



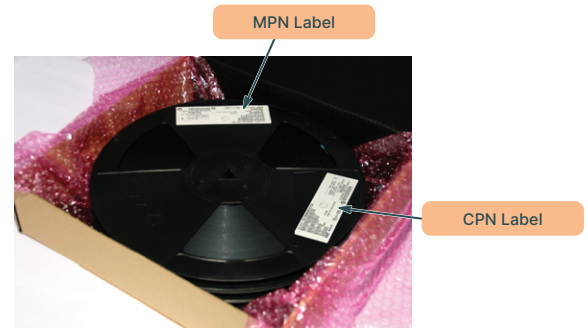
Overpack Box with Shipping Label and Packing List



Overpack Box with Intermediate Boxes

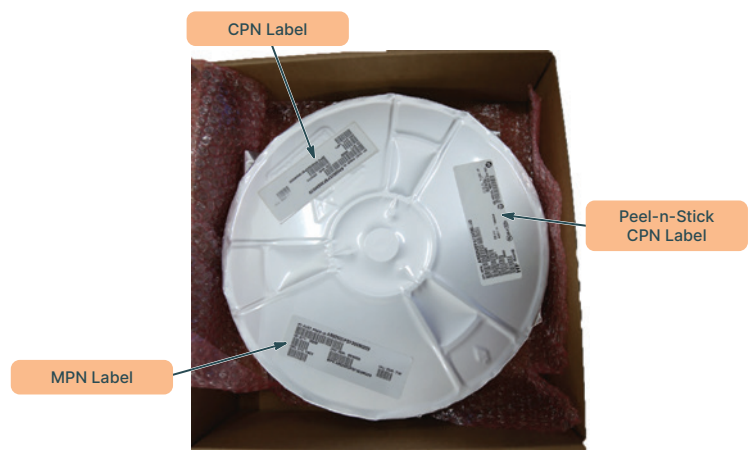


Intermediate Box with MPN and CPN Labels (If Applicable)



Tape & Reel (13") – with MPN and CPN Labels (If Applicable)

Note: Box ESD inner lining shown here is not a mandatory requirement



Tape & Reel (13") in Vacuum Pack – with MPN and CPN Labels (If Applicable)

Note: Box ESD inner lining shown here is not a mandatory requirement

Tape-and-Reel 7" Packaging and Labeling



Overpack Box with Shipping Label and Packing List



Overpack Box with Intermediate Boxes



Intermediate Box with MPN and CPN Labels (If Applicable)

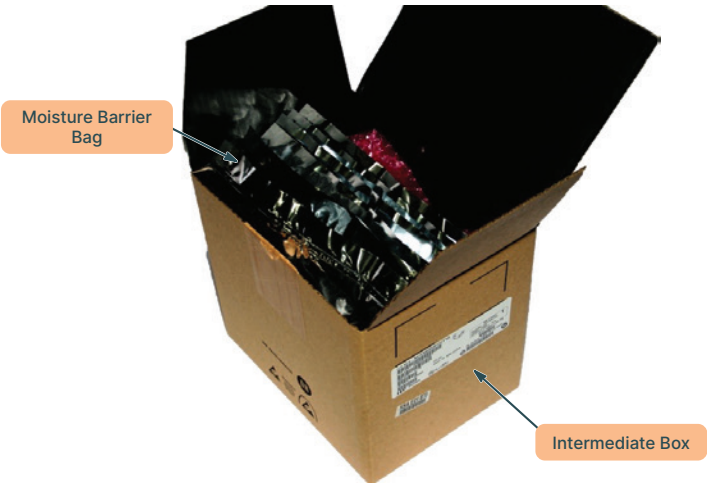


Tape and Reel 7" with MPN and CPN Labels (If Applicable)

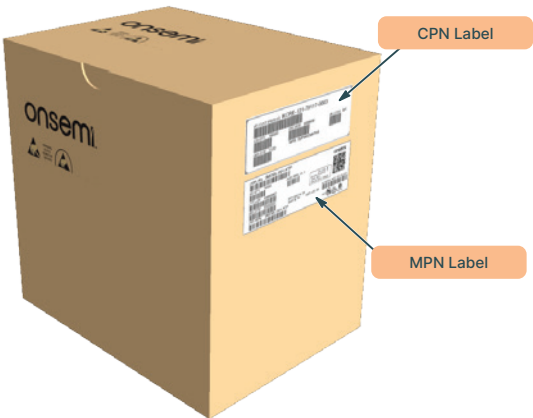
WLCSP 7" Reel Packaging and Labeling



Overpack Box with Shipping Label and Packing List



WLCSP Intermediate Box – with MPN and CPN Labels (If Applicable)
Note: Box ESD inner lining shown here is not a mandatory requirement



Intermediate Box with MPN and CPN Labels (If Applicable)



WLCSP Moisture Barrier Bag – with MPN and CPN Labels (If Applicable)

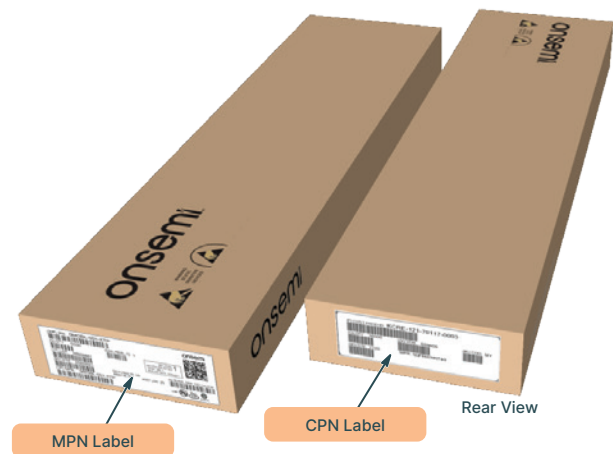
Rails Packaging and Labeling



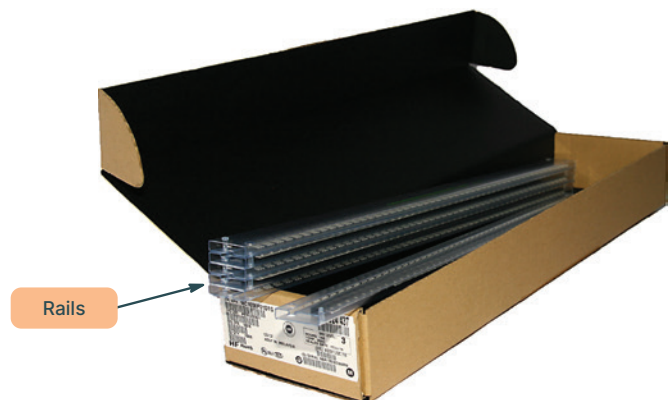
Overpack Boxes – with Shipping Label and Packing List



Overpack with Intermediate Boxes



Intermediate Box – with MPN and CPN Labels

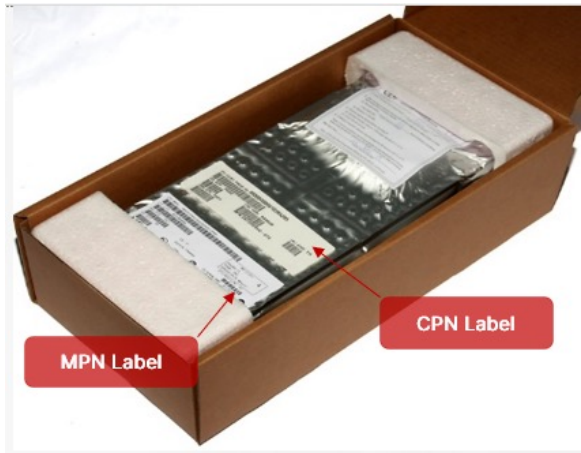


Rails in Vacuum Bag and Velcro Strage – with MPN, CPN and CPN Peel-n-Stick Labels (If Applicable)

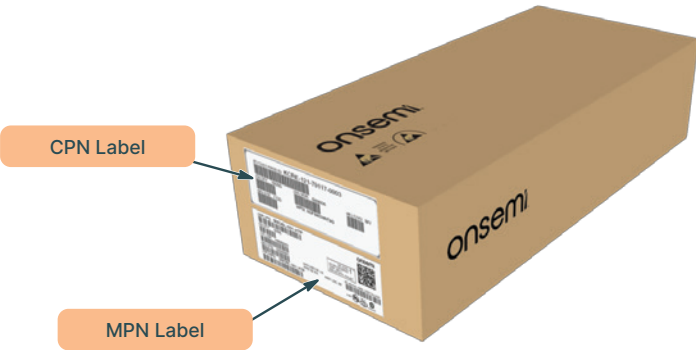
Tray Packaging and Labeling



Overpack Box with Shipping Label and Packing List



Tray (Styrofoam End Caps) with MPN and CPN Labels (If Applicable)



Intermediate Box with MPN and CPN Labels (If Applicable)

Logo Replacement Transition Plan

In Q3-2021, **onsemi** revealed its new trade name “**onsemi**” and refreshed brand as a next step in the company’s evolution to establish itself as the leading provider of intelligent power and sensing technologies. Starting Q4-2021, **onsemi** will be converting the Intermediate Box Packaging to rebranded Logos and Graphics. Subsequently, there will be a variety of packaging, labeling and graphics combinations as outlined in the table below:

Packaging/ Labeling Transition	Current Stage	Transition Stage	Steady State Final
Intermediate Box Graphic	ON Semiconductor	ON Semiconductor or onsemi	onsemi
Overpack Shipping Label	ON Semiconductor or none	onsemi or none	onsemi
Intermediate Box Label	ON	ON Semiconductor or onsemi or both	onsemi
Primary Container Label	ON	ON Semiconductor or onsemi or both	onsemi

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Phone: 011 421 33 790 2910

Europe, Middle East and Africa Technical Support:

Phone: 00421 33 790 2910
For additional information, please contact your local Sales Representative