



ON Semiconductor Packaging and Labeling Guidelines

Ver. 1.6 – 2009.09.21



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Definitions

- **MPN Label:** A bar code label containing the ON Semiconductor Manufacturer Part Number of the device and other traceability information. Label dimensions are 1.625" x 4.9" (41.3mm X 124.5mm).
- **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" (41.3mm X 124.5mm).
- **Intermediate Box:** The box that houses the reel 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" (114.3mm X 165.1mm)
- **Overpack Box:** 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 ON Semiconductor MPN Label. The label consists of the following elements:

Field Name	Description
MPN (1P) *	Manufacturer Part Number
LOT (1T) *	Lot Number
DTE (9D) *	Date Code(s)
QTY (Q) *	Quantity in container
SERIAL NBR (S) *	Unique serial comprised of 2 digit site code, and 2 digit year, and 5 digit incremental number.
Assy in	Country of assembly
CS Custom Source	2 digit country code of wafer fabrication
Pb Free Logo	Indicates if material is Pb Free.
2LI e category	Indicates type of 2nd level interconnect plating
RoHS=Y	Indicates if material complies with Europe RoHS
MS Level	Moisture Sensitivity Data
Temp	Temperature
Hours	Hours
Sealed	Sealed Date
* -- Barcoded Fields	

Sample MPN Label:

(1P) MPN: MBR5140T3 	CS:US  2LI  RoHS = Y
(1T) LOT: P606BR06G 	assy. in: MALAYSIA(TB)
(9D) DTE: 0606 	1 year MS Level: 2 Sealed: 10May07 Temp: 260C
(Q) QTY: 2500 	(S) SERIAL NBR: SW070001Z  



CPN Label

Some Intermediate Boxes may have a standard ON Semiconductor CPN Label. The label consists of the following elements:

Field Name	Description
CPN (P) *	Customer Part Number
QTY (Q) *	Quantity in container
VDR (2V) *	UCC Vendor Code for ON Semiconductor
DTE (9D) *	Date Code(s)
MPN	Manufacturer Part Number
* -- Barcoded Fields	

Sample CPN Label:





Shipping Label

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

Field Name	Description
FROM	ON Semiconductor 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 *	ON Semiconductor UCC code, packing List 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 # *	Packing List number + which package out of the total number of packages in the shipment
(No Header)	Various Environmental Logos [see below for logo definitions]
COO Assy	Country of Origin based on Assembly, with the 2 digit ISO Country Code. If there are multiple countries of origin, the word MULT will be printed in this space
(No Header)	Customer Code
* -- Barcoded Fields	

Sample Shipping Label:

FROM: ON SEMICONDUCTOR 2F #1 SCIENCE PARK EAST AVE., HONG KONG	SHIP TO: 1F MTL WAREHOUSE PHASE 2 BTH1, KWAI CHUNG CONTAINER TERMINAL (ARTESYN PROJ)
MPN: MBRD640CTT40 FO: 20340N 01 A01	
(3S) PKG ID: 689606BAX3C5001	
(K) TRANS ID: 330241	
(P) CUSTOMER PROD ID: 108008-040	
(Q) QUANTITY: 7500	2LI e3 RoHS = Y 50
(13Q) PACKAGE COUNT: 1/1	
(S) SERIAL #: BAX3C5 + 1/1	COO ASSY: PH
FACT EPSD: 18 SEP 06 LPSD: 25 SEP 06	AOVHHK
D/C EPSD: 25 SEP 06 LPSD: 26 SEP 06	

ON Semi
Internal
Use

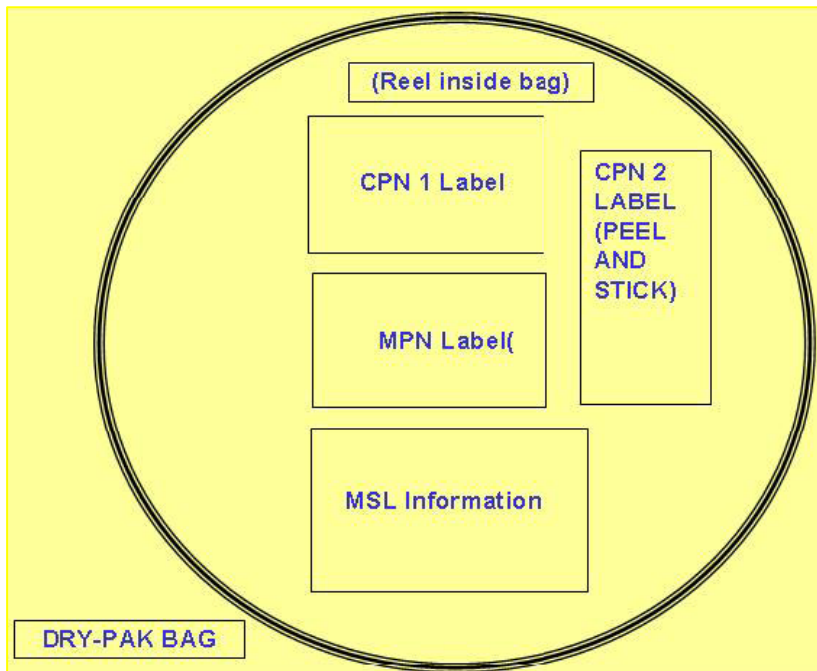


Dry Pack Labeling

For product requiring dry packing, CPN labels will be included per the following process:

- **CPN Label 1** will be permanently affixed on the outside of the dry pack bag above the MPN label.
- **CPN Label 2** will be a REMOVABLE (peel and stick) label that will be placed on the outside of the dry pack bag using the following steps:
- **CPN Label 3** will be permanently affixed on the outside of the intermediate carton

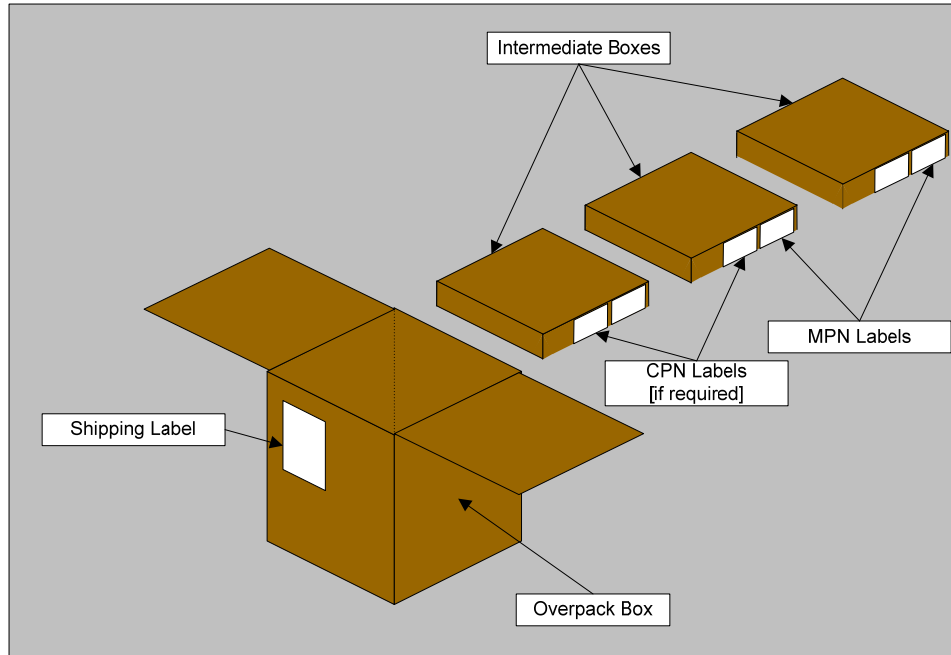
Sample Dry Pack Labels and Example:





Packaging and Graphics

Shipments from ON Semiconductor will follow ON'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.



On August 31, 2009, ON completed the integration of Catalyst Semiconductor [CATS] Systems and converted all inventory. Throughout Q2-09 and Q3-09, ON will be converting the Intermediate Box Packaging to ON Standards with ON Logos and Graphics. Subsequently, there will be a variety of packaging, labeling and graphics combinations as outlined in the two matrices below. Historically, Catalyst packaging included a variety of informational and/or regulatory decals on the outside of the intermediate box. Moving forward with ON standard packaging, these will be included in either the box graphics itself, or on the various labels previously described.

Before Systems Integration

Overpack Box Logo	None	None
Overpack Shipping Label	CATS	CATS
Intermediate Box Logo	CATS	ON
Intermediate Box Label	CATS MPN/CPN	CATS MPN/CPN
Primary Package Label	CATS MPN/CPN	CATS MPN/CPN

After Systems Integration

Overpack Box Logo	None	None
Overpack Shipping Label	ON	ON
Intermediate Box Logo	CATS	ON
Intermediate Box Label	ON MPN	ON MPN
Primary Package Label	ON CPN	ON CPN

Future Steady State



Electrostatic Notification





Packing List & Certificate of Compliance

The primary Overpack box will contain a packing list detailing the contents of all Overpack boxes in the order. The Packing List contains ON's standard Certificate of Compliance. The label consists of the following elements:

	Field Name	Description
Text	Ship From	ON Semiconductor Return Address
	Ship To	Customer's Name and Address
	Bill To	Customer's Billing Address
	Customer code	ON Semiconductor designated customer identifier
	End Customer PO No.	Issuing Customer purchase order number
	S/B	Pick Bank (formerly called Source Bank)
	F/O	Sales Order (formerly called Factory Order)
	S/J	Sub Job (3 maximum sub jobs, then prints multiple)
	L/L	Sales Delivery (formerly called Line/Line) (3 maximum deliveries, then prints multiple)
	Purchase Order Date	Purchase Order Issuance Date
	Customer Req. Date	Customer Required Date
	Manufacturer P.D. Date	Manufacturer Planned Delivery Date
	CSD	Customer Schedule Date
	FOB	Freight On Board – Customer takes possession at the location specified
	TERMS	Freight shipping terms (who pays the freight)
	Ship VIA	Carrier or Freight Forwarder
	PKG#	Shipment package number
	Weight	Package weight in pounds and kilograms
	Waybill Number	Shipper identification number for that shipment used for tracking
	Lot Number	Product manufacturing lot number
	Quantity	Manufacturing lot quantity
	Date Code	Manufacturing dates
	Assembly Location	Manufacturing Location
Die Origin	Die Fabrication Location	
Bar Code and Text	(2V) Vendor ID	ON Semiconductor UCC number or Customer assigned Vendor Code
	(11K) Packing List	Packing List number (ON Semi pickref)
	(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) Manufacturer Part Number	ON Semiconductor 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
	(13D) Date Code	Product dated code(s)



Sample Packing List:

SHIP FROM

ON Semiconductor



(2V) VENDOR ID: 689606

(11K) PACKING LIST: BBD31L

DATE: 05 FEB 03
PAGE 1 OF 1

ON SEMICONDUCTOR
2F #1 SCIENCE PARK EAST
AVE., HONG KONG
852 - 2666-8333

CUSTOMER CODE: DJSAX
END CUSTOMER PO NO.

PO ITEM: 1

S/B: WW10
P/O: 07000M-01
S/J: A01
L/L: 01

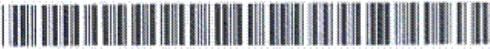
PURCHASE ORDER DATE: 03 FEB 03
CUSTOMER REQ. DATE: 07 FEB 03
MANUFACTURER P.D. DATE: 13 FEB 03
CSD: 31 JAN 03

SHIP TO

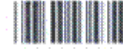
WUJIANG CITY, JIANGSU

WUJIANG CITY, JIANGSU

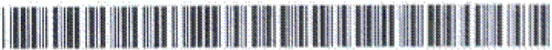
(4S) PACKAGE ID: 689606 BBD31L



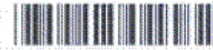
(Z) PARCELS: 1



(K) TRANS ID: TEST-CHINA FLOW2



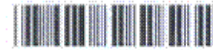
(2Q) TOTAL WEIGHT IN KG: 3.5
(7LBS 11OZ)



(P) CUSTOMER PROD ID: 210522000405



(Q) QTY THIS SHIPMENT: 3,000



(1P) MANUFACTURER PART NUMBER: MMBT3904LT1



(13D) DATE CODES
OLDEST/NEWEST: 03030303



SHIP VIA:	TERMS:	LOT NUMBER:	DATE:	ASSEMBLY LOCATION:	DISTRICT:
SA	NW	NQ1024110	0303	CHN	KA
CHARGES:	0.00				
(WEIGHT)					
PKGS	LBS	KGS	WAYBILL NUMBER		
(001)	7.7	3.5			

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. NO CHANGES AUTHORIZED BY ON SEMICONDUCTOR IN WRITING. RECORDS SUBSTANTIATING THE ABOVE STATEMENTS ARE AVAILABLE IN OUR FILES FOR INSPECTION BY AUTHORIZED PERSONNEL.

KENAN SVAMS, VICE PRESIDENT AND DIRECTOR QUALITY

S# 000000.0292

NOTICE TO 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 OF THEIR CONTAINERS MUST BE MARKED IN A CONSPICUOUS PLACE AS 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 ARTICLES.

CS CHK: N

ON PACK 0108 (R 0303)

Certificate of Compliance