



- Encouraging and expecting the creative involvement of every TI'er.
- Listening to our customers and meeting their needs.
- Continuously improving our processes, products and services.

How to identify the material?

1.) By Ship Track Code (STC)

The easiest and fastest way to identify the material is to compare the affected Ship Track Codes (STC) in the xls-file (column labeled as "STC") with the Ship Track Codes (STC) if the material you have in stock.

This is the Ship Track Code (STC) – the unique tracking number for each shipping container!



Special Notes regarding Labeling Data Fields (not in table 1):

- Texas Instruments Logo** is a mandatory requirement for customs and customer requirements. "CSA" (or UL) logo is automatically printed if material master lists the part as registered to 1 of these agencies.
- Made In Country** is automatically derived from ASO Country (or CSO Country if product requires no assembly)
- RoHS Logo** – From spec system, indicated material is fully compliant to European & China RoHS regulations (when populated with "e"), or has a useful life period before regulated materials may leach from the product (# years will be populated inside, ie: 50).
- +5** appended to Date Code – A numeric value following a "+" character indicated the shelf life of the product (ie: +5 = Date Code + 5 years shelf life). Standard shelf life is 3 years using standard packing materials.

Left side of Label		Center of Label		Right side of Label	
MS LVL	Moisture Sensitivity Level (If highest temp is not Level 1, then 2 MSLs may be listed)	Pb-Free Symbol	Pb with a slash is Pb-free. <ul style="list-style-type: none"> • An E2, E3, E4, En... is Lead (Pb) free, RoHS and JIG-101 compliant • A G2, G3, G4, Gn... is Lead (Pb) free, RoHS, JIG-101 compliant & does not contain Antimony or Bromines 	(1P)	TI Orderable Part Number
2DC	If 2 Date Codes are contained, the newest is listed here			(Q)	Quantity of units in reel, box, tube, bag, etc.
2Q	If 2 Date Codes are contained, the quantity is listed here	2D Bar Code Label	If any other visual data on label leads to some level of suspicion, then we can scan the 2D code and integrate the data structure (when this becomes necessary, BusIT (Dan Wikander) should authenticate.	(D)	Datecode (YYWW = Year/Week, oldest will be listed here if more than one
SEAL DT:	Seal date of the units			(31T)	QA Lot Number with Assembly Site Code
FLR LIFE	Floor life of the units once seal is broken			(4W)	Only 3 possible values at TKY=full turnkey processing, NTY=Non-Turnkey (orange attn: label to accompany material to support customer waiver. SWR=Special Work Request (Engineering Material).
TMP	Maximum process temperature			(1T)	Ship Track Code (STC)
OPT	Usually empty but this would be LBE/Make defined Optional Text.			(P)	Customer Part #
ITEM:	Usually empty but in some cases may be populated with a Die Name or 2 character Year-Month codes to far right which must match 1 st 2 characters of Assy LTC(s).			(2P)	Die Revision of TI Part Number
LBL:	Identifies the original STC packing sequence of batch			(V)	TI WW ISO Supplier ID (hardcoded & always 0033317)
(L) TO:	This would have been the Ship-to instruction when material was packed. It is also not very significant because a reallocation / redirect may have occurred after label was printed.			(20L)	Location of Wafer Fab
				(21L)	Country of Wafer Fab
				(22L)	Location of Assembly Site
				(23L)	Country of Assembly Site



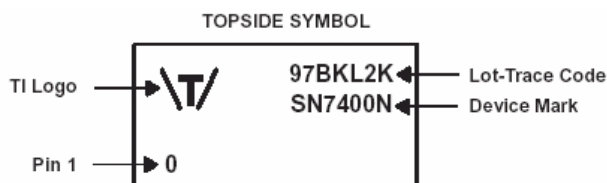
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2.) By Lot Trace Code (LTC)

In the case the material in question has been already shipped to your end customers and is removed out of the original TI carrier boxes or mounted on board, so the identification of the material must be done for the Lot Trace Code (LTC) printed on each device top surface. For that, please compare the affected Lot Trace Code (LTC) in the xls-file (column labeled as "AssyLTC") with the 7digit code printed on the devices top surface.

Each TI part is marked with a unique Lot Trace Code (LTC). It might appear in a single line or in double line.

Y = year (e.g. 1 = 2001, 2 = 2002 etc.)
 M = month (e.g. 1 = Jan, 2 = Feb ... 9 = Sep, A = Oct, B = Nov & C = Dec)
 LLLL = independent Assembly Number and S = Assembly Site Code.



<p>Figure 1: The part is marked with 2 rows, first containing the Lot Trace Code (LTC) and second line explains the device function.</p>		
<p>Figure 2: The part is marked with 3 rows, first explains the device function, second and third line containing the Lot Trace Code (LTC).</p>		
<p>Figure 3: Is used only on smaller packages where neither Format 1 nor Format 2 is feasible. This format loses the full LTC and decreases lot-genealogy capability (from the individual component) to all lots of a device type in a specific year and month.</p>		
<p>Figure 4: This format shows only 5digits of the full LTC and decreases lot-genealogy capability. A grade marking can be applied on the left hand side if needed. Sometimes this is hard to see, but tilting the unit slightly make it visible. It may have a different color and shape then the device symbol.</p>		
<p>Figure 5: Additional special formats are used on very small packages, such as SOT/TO. The format is tailored to the specific package. This package is very small and has space for only 4 characters of marking</p>		

Depending on manufacturing volumes, many different lot trace codes may be contained within each month. A new year begins in the week of the first Thursday of the year. This information is taken from Mil Spec 1285 and EIA standard 576-A.