

DISTRIBUTORS' POSITION PAPER ON LEAD FREE PRODUCT TRANSITION AND RoHS COMPLIANCE

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NATIONAL ELECTRONIC DISTRIBUTORS ASSOCIATION

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Contributing members included:

All American

Allied Electronics

Arrow Electronics

Avnet

Future Electronics

Marsh Electronics

Memec: Insight Electronics & Unique Technologies

Newark InOne

TTI

Introduction:

In February of 2003 the European Union released The Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2002/95/EC) restricting the use of Lead, Cadmium, Mercury, Hexavalent Chromium and PBB/PBDE flame retardant materials in electrical and electronic products sold in Europe beginning July 1, 2006.

http://www.environment-agency.gov.uk/netregs/legislation/380525/477158/

http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/1 037/1 03720030213en00190023.pdf

Supplier-authorized distributors are committed to helping component manufacturers and customers of electronic components develop and manage effective Lead Free product transition and RoHS compliance plans.

Customer perspectives:

In response to the RoHS directive and other environmental initiatives, customers are embarking on substantial product design and process changes. Customers have an immediate need for answers to the following questions.

- 1. What parts are being transitioned to Lead Free designs?
- 2. Which parts are RoHS compliant?
- 3. Are there part number changes?
- 4. If there are no part number changes how will we be able to order compliant parts?
- 5. How will we be notified of changes?
- 6. Will packaging or parts be conspicuously labeled as Lead Free or RoHS compliant?
- 7. What are the introduction schedules?
- 8. When will samples be available?
- 9. When will production parts be available?
- 10. Are there price changes?
- 11. Will parts with Tin/Lead plated leads still be available?
- 12. Is solder profile data available?
- 13. Here's my Bill of Materials, please answer all the above.

It is crucial that all of this information be readily accessible to distributors and customers in a format which will enable us to manage inventory, support customer inquiries, respond to quote requests and process orders.

The Importance of Unique Manufacturer Part Numbers

Perhaps the most disturbing variation that distributors see in early transition plans of component manufacturers is the release of new lead free designs to existing parts, without new part number assignments. This is a disaster in the making as component manufacturers, distributors and customers struggle to distinguish Lead Free/ RoHS compliant parts from the older parts that will be mixed throughout the supply chain. The confusion will disrupt the electronics supply chain and significantly increase operating costs for everyone.

If there are no unique Part Numbers:

- How do customers order Lead Free/RoHS compliant parts?
- How do distributors order Lead Free/RoHS compliant parts?
- How do you identify Lead Free/RoHS compliant parts in inventory?
- How does the customer manage parts in its MRP system?
- How will distributors manage customer bonded inventory assignments?
- How do you manage returns?
- How do customers identify part changes and report chemical content (e.g. IMDS)?
- How do customers identify non compliant parts in production processes and manage the application risks associated with using parts containing lead in high temperature, lead free solder systems?
- How do customers in the exempt industries (Aerospace and Defense) order parts with lead content?

Many component manufacturers recognized these problems and are creating unique part numbers – often by adding a part number suffix or common identifier within the part number itself.

NEDA Distributors strongly recommend that manufacturers, who have elected to make a "running change" without new part numbers, reconsider their position. Nothing short of new part numbers for Lead Free/RoHS compliant parts will avert a significant disruption of the supply chain, increase costs and raise regulatory compliance issues.

Lead Free Transition/RoHS Compliance Information Requirements

While many manufacturers have developed web site designs to provide general Lead Free/RoHS compliance product information, these sites do not supply the data elements required to compile, manage and communicate Lead Free/RoHS compliant product information from hundreds of manufacturers, on thousands of part numbers, on a daily basis to thousands of customers.

Many component manufacturers have released product change notices to alert distributors and end customers of transition plans and schedules. The best of these only provide general availability dates – often by product family. <u>Distributors and customers require more precise</u> information by part number and date code.

Required Data Elements

NEDA member distributors are providing the attached spreadsheet format to component manufacturers as a means of reporting Lead Free/RoHS compliance transition information at the part number level. Manufacturers should be able to populate much of this information from their existing product databases. Distributors recognize that there are costs to creating new part numbers, but view any other alternative as significantly more expensive to the entire industry.

The header information provides us with links to manufacturer Lead Free/ RoHS contacts and resources. The detailed parts list and data set provide distributors with sufficient data to respond to customer inquiries and quotes. This information will also help distributors to properly order, stock and sell product.

Manufacturers' benefits:

- Improved sales
- Reduced liability risks
- One set of data can be used to communicate information uniformity to all distributors and end customers
- Fewer Lead Free related inquiries
- Fewer order errors
- Fewer returns
- Improved customer satisfaction

We believe that managing the lead free transition/ RoHS compliance information in the suggested format will provide for smoother transition management throughout the supply chain – and component manufacturers, distributors and customers will benefit.

Returns Policy Considerations

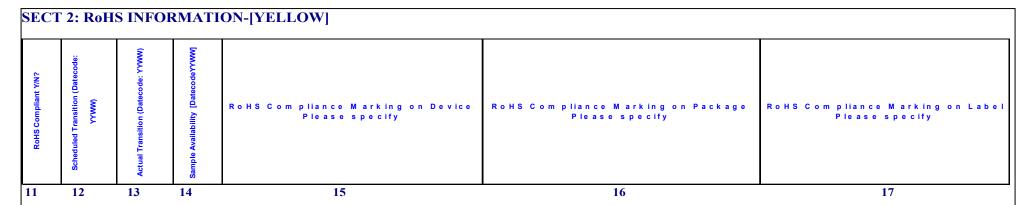
Manufacturers will also need to develop appropriate policies to help dispose of <u>non Lead Free/RoHS compliant parts</u> which are already in the supply chain. This information should be provided to individual authorized distributors by each manufacturer. These policies will need to consider individual market demands and individual business agreements.

Attachment: Lead-Free/RoHS Compliance Information Worksheet.

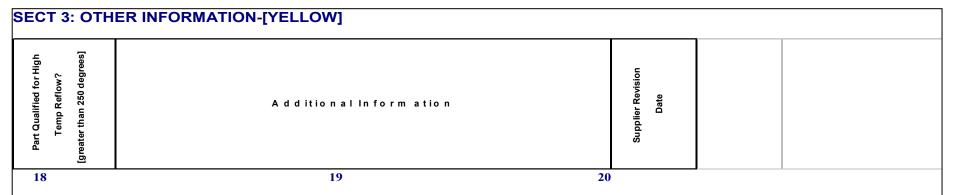
Lead Free/RoHS Product Information Worksheet Instructions

SECT 1: LEAD FREE	INFC	ORMATION-[BLUE]							
Active Mfr Part Number(s) as of January 1, 2002 (Original Pb Parts Only)	Discontinuation Date (Datecode: YYWW)	Pb Free Corresponding Part Number (Include parts that were Lead- Free at release)	Part Number Unique for Pb Free Y/N3	Scheduled Transition (Datecode: YYWW)	Actual Transition (Datecode: YYWW)	Sample Availability [Datecode YYWW]	Lead Free Component Marking (Pb Free Indicator) Please specify	Lead Free Package Marking (Pb Free Indicator) Please specify	Product Label Marking Change (Pb-Free Indicator) Please specify
1	2	3	4	5	6	7	8	9	10

- **Step 1**: Fill out the Mfr Part Number: List all leaded components that your company supplies as of 1/1/02.
- **Step 2:** Fill in the Discontinuation Date: Of the components listed in Step 1 are any part numbers being discontinued? Please fill in the date code (format:YY/WW) that part is being terminated. If part is not being terminated please leave this column blank.
- **Step 3**: Fill in the Lead-free Corresponding Part Number: List the lead-free component number corresponding to the leaded part listed Column A. Additionally, please list all parts that were lead-free at release. These parts would not have a parallel leaded part in Column A.
- Step 4: Unique Part Number Y/N? Is the part number a unique to lead free, if so type "Y". Is the part number used for both leaded and lead-free components, if so type "N"
- Step 5: Scheduled Transition Date: List the date code (format: YY/WW) that parts are scheduled for transition
- Step 6: Actual Transition Date: List the date code (format: YY/WW) that parts actually became lead free.
- **Step 7**: Sample Availability: When will lead-free samples be available for customers to order? List the date code (format: YY/WW):
- Step 8: Component Marking: Is there a lead-free indicator on the component? If so, describe
- Step 9: Packaging Marking: Is there a lead-free indicator on the packaging? If so, describe
- **Step10**: Product Label Marking: Is there a lead-free indicator on the packaging label? If so, describe



- Step 11: RoHS Compliance Y/N: Are parts not only lead Free but also compliant with RoHS directive
- For more information on RoHS see attached link: http://164.36.253.20/sustainability/pdfs/finalrohs.pdf
- **Step 12**: Scheduled Transition Date: List the date code that parts are scheduled to become RoHS Compliant.(format: YY/WW)
- Step 13: Actual Transition Date: List the date code when parts are actually RoHS Compliant. (format: YY/WW)
- Step 14: Sample Availability: When will RoHS compliant samples be available for customers to order? List the date code (format: YY/WW):
- Step 15: RoHS Component Marking: Is there a RoHS Compliance indicator on the component? If so, describe
- Step 16: RoHS Packaging Marking: Is there a RoHS Compliance indicator on the packaging? If so, describe
- Step 17: RoHS Label Marking: Is there a RoHS Compliance indicator on the packaging label? If so, describe



- Step 18: Is Part Qualified for High Temp Reflow Y/N? [temperature greater than 250°C] Please answer Y or N.
- Step 19: Additional Information: Add any additional information that may be helpful to the distributor or customer.
- **Step 20**: Supplier Revision Date: When making a change to an existing record please fill in the "Supplier Revision Date" This will help us update any record where the data has been modified.



National Electronic Distributors Association Lead-Free/RoHS Product Information Worksheet



Date:									

Manufacturer:			Email					Phone:	
Pb Free-RoHS Contact:				Lead Free Website:				Fax:	
Active Mfr Part Number(s) as of January 1, 2002 (Original Pb Parts Only)	Discontinuation Date (Datecode: YYWW)	Pb Free Corresponding Part Number (Include parts that were Lead-Free at release)	Part Number Unique for Pb Free Y/N?	Scheduled Transition (Datecode: YYWW)	Actual Transition (Datecode: YYWW)	Sample Availability (Datecode YYWW)	Lead Free Component Marking (Pb Free Indicator) Please specify marking	Lead Free Marking (Pb Free Indicator) on Unit Container (carton, reel, bag) Please specify marking	Product Label Marking Change (Pb-Free Indicator) Please specify marking
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RoHS Compliant Y/N?	Scheduled Transition (Datecode: YYWW)	Actual Transition (Datecode: YYWW)	Sample Availability (Datecode YYWW)	RoHS Compliance Marking on Device Please specify marking	RoHS Compliance Marking (Pb Free Indicator) on Unit Container (carton, reel, bag) Please specify marking	RoHS Compliance Marking on Label Please specify marking	Part Qualified for High Temp Reflow Y/N? (greater than 250 degrees)	Additional Information	Supplier Revision Date