



NIC Components Corp. - RoHS Compliance Notice and Roadmap

Please be advised, the following document outlines NIC Components Corp. compliance strategy with the goal to meet WEEE - ROHS requirements of EC Directive on Waste Electrical and Electronic Equipment (WEEE) and EC Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (ROHS).

Maximum concentration values (MCV) define the maximum amount of an individual restricted substance (per the EU RoHS directive) within each homogeneous material* that compose the component.

RESTRICTED (ROHS) MATERIALS:

1. Lead (Pb):

MCV: < 0.10% = < 1,000PPM

Exception: Allowable Lead (Pb) within glass of electronic components (ie. glass coat or frit)

2. Mercury (Hg):

MCV: < 0.10% = < 1,000PPM

3. Hexavalent Chromium (Cr VI):

MCV: < 0.10% = < 1,000PPM

4. Cadmium (Cd):

MCV: < 0.01% = < 100 PPM

5. & 6. Poly brominated flame retardants (PBB and PBDE):

MCV: < 0.10% = < 1,000PPM

* - Homogeneous materials are defined as materials that cannot be mechanically disjointed into different materials and are "of uniform composition throughout" Types include: liquids, plastics, ceramics, glass, metals, alloys, paper, resins, and coatings.

ACTION #1 - RoHS Transition Announcement

RoHS Compliant Products and Part Numbers **will be phased in by end of calendar 2005** as the **standard - default part number** (inventoried product).

ACTION #2 - RoHS Compliant Material Identification

In compliance with National Electronic Distributors Association (NEDA) and National Electronics Manufacturing Initiative's (NEMI) recommendations, NIC will institute use of **unique part number suffix identifier "F"** to identify **RoHS compliant** material. This effort is made to enable control and identification **RoHS compliant** material throughout the supply chain.

Examples:

1. **RoHS Compliant** SMT Aluminum Electrolytic Capacitors ... P/N: NACxxxxxxxxxxTRF
2. **RoHS Compliant** SMT MLCC - Ceramic Chip Capacitors ... NMCxxxxxxxxxxxxTRPF

[continued]



ACTION #2 - RoHS Compliant Material Identification [continued]

SUB: Pb-Free (Lead Free) Material Identification


To allow easy identification of all PoHS compliant material, all NIC Components Corp Reel, Bag, Box, Cartons will have **RoHS Compliant label** as shown in example below.

Second interconnect material (Example: "E2" for Sn) and maximum safe exposure temperature for each product series are listed at www.niccomp.com/rohs



ACTION #3 - Non-RoHS Compliant Products

As of March 31, 2006, legacy part numbers for NIC product series will have completed transition to Pb-Free finish on terminals - terminations.
Link: <http://www.niccomp.com/pcn.html-ssi#Legacy>

 **For best long-term availability, conversion to RoHS compliant part numbers is strongly encouraged.**

Legacy P/N: NMC0603NPO101J25TRP ... **RoHS P/N:** NMC0603NPO101J25TRPF
Legacy P/N: NRSA101M16V6.3X11 ... **RoHS P/N:** NRSA101M16V6.3X11F
Legacy P/N: NRC06F1001TR ... **RoHS P/N:** NRC06F1001TRF

Please contact NIC for assistance in your part number migration or conversion efforts ■ e-mail: RoHS@niccomp.com

[continued]

DATE: DATE: Feb 17, 2006
Notice : NIC RoHS_1004C



Sub: RoHS (Pb-Free) Components with 100% Sn Finish

RE: Tin Whisker

NIC Components Corp will assure NEMI exception conditions are met, items #1 ~ 4 listed below, to assure compliance with the discrete resistor and capacitors exception detailed within the NEMI tin whisker acceptance testing guideline.

National Electronics Manufacturing Initiative's (NEMI) Tin Whisker Acceptance Test Requirements for 100% Sn (Tin) finish components identifies (Test guideline submission 2.6 7/28/04 ... Per Section 6) ... **discrete resistor and capacitors are exception to tin whisker test requirements** if:

1. Matte Sn finish thickness of at least 2um (80 micro-inches)
2. Ni barrier thickness of at least 2um (80 micro-inches)
3. A controlled and monitored plating process for:
 - + plating bath parameters: current density, voltage, acidity,
 - + plating bath chemistry and material contamination
 - + plating thickness
 - + plating stress
 - + plating grain size
 - + plating crystallographic texture
 - + plating carbon content below 0.05% and copper content below 0.5%
4. Periodic Tin Whisker Monitoring

Ref: http://www.nemi.org/projects/ese/tin_whisker.html

Additional RoHS Documentation;

Green Statements
Pb-Free Soldering Profiles
are available on the NIC website:
www.niccomp.com/rohs

- Please contact NIC for direct assistance in your part number migration or conversion efforts ■ e-mail: RoHS@niccomp.com

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A handwritten signature in black ink, appearing to read 'Jim Wright', is written over a light blue background.

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PRODUCT CHANGE NOTICE

10/01/2004

SUBJECT: Component Part Number Change

NIC PRODUCT SERIES: All NIC Product Series; See below table

Please be advised that the following is notice of **standard - default part number change** from **Legacy** (non-RoHS) to **RoHS compliant** part number. Part number migration is shown on table below.

EFFECTIVE DATE: Phased in through end of calendar 2005 as the standard - default part number (inventoried product).

PART NUMBERS EFFECTED: All NIC products; See table below.

REASON FOR CHANGE:

To provide clear - easy to follow - system for identification of RoHS (Pb-Free) compliant versions of NIC products. Also to comply with industry recommendations for new unique part numbers for RoHS (Pb-Free) compliant products [Ref: NEDA & JEDEC guidelines]

<u>Legacy NIC P/N</u>		<u>NIC RoHS P/N</u>		<u>Legacy NIC P/N</u>		<u>NIC RoHS P/N</u>
NACE	→	NACE....F		NACX	→	NACX....F
NACEN	→	NACEN....F		NACY	→	NACY....F
NACEW	→	NACEW....F		NACZ	→	NACZ....F
NACH	→	NACH....F		NACZF	→	NACZF....F
NACHL	→	NACHLF		NAM	→	NAM....F
NACK	→	NACKF		NAP	→	NAP....F
NACL	→	NACL....F		NCA	→	NCA....F
NACM	→	NACM....F		NCB	→	NCB....F
NACNW	→	NACNWF		NCD	→	NCD....F
NACP	→	NACP....F		NCF	→	NCF....F
NACS	→	NACS....F		NCM	→	NCM....F
NACT	→	NACT....F		NCMA	→	NCMA....F
NACV	→	NACV....F		NDTM	→	NDTM....F
NACVF	→	NACVF....F		NEM	→	NEM....F

[continued]



<u>Legacy NIC P/N</u>	<u>NIC RoHS P/N</u>	<u>Legacy NIC P/N</u>	<u>NIC RoHS P/N</u>
NFA	NFAF	NREL	NREL....F
NIN	NIN....F	NRE-LS	NRE-LS....F
NIN-H	NIN-HF	NRE-LW	NRE-LW....F
NIS	NIS....F	NRE-S	NRE-S....F
NLE	NLE....F	NRE-SN	NRE-SN....F
NLE-L	NLE-L....F	NRE-SW	NRE-SW....F
NLE-S	NLE-S....F	NRE-SX	NRE-SX....F
NMC NPO	NMC NPO....F	NRE-WB	NRE-WBF
NMC X7R	NMC X7R....F	NRLF	NRLF....F
NMC X5R	NMC X5R....F	NRLFW	NRLFW....F
NMC Y5V	NMC Y5V....F	NRLM	NRLM....F
NMC-E	NMC-E....F	NRLMW	NRLMW....F
NMC-L	NMC-LF	NRM	NRM....F
NMC-H	NMC-H....F	NRM-S	NRM-S....F
NMC-M	NMC-MF	NRN	NRN....F
NML	NMLF	NRP	NRP....F
NMO	NMO....F	NRSA	NRSA....F
NMR	NMR....F	NRSG	NRSGF
NNR	NNR....F	NRSJ	NRSJF
NPI	NPI....F	NRSK	NRSKF
NPI	NPI....F	NRSN	NRSN....F
NPRM	NPRM....F	NRSS	NRSS....F
NPTM	NPTM....F	NRSX	NRSXF
NRC	NRC....F	NRSY	NRSY....F
NRCE	NRCEF	NRSZ	NRSZ....F
NRD	NRD....F	NRSZC	NRSZCF
NRE-H	NRE-H....F	NRWA	NRWA....F
NRE-HW	NRE-HW....F	NRWS	NRWS....F

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Legacy NIC P/N		NIC RoHS P/N
NRWX	→	NRWX....F
NSD	→	NSD....F
NSFC	→	NSFC....F
NSHC	→	NSHCF
NSP	→	NSPF
NSPC	→	NSPC....F
NSPE	→	NSPEF
NSPER	→	NSPERF
NSPU	→	NSPUF
NSPZ	→	NSPZF
NSPZR	→	NSPZRF
NSR	→	NSR....F
NSRN	→	NSRN....F
NSRW	→	NSRW....F
NSRZ	→	NSRZ....F
NSTE	→	NSTEF
NSTEW	→	NSTEWF
NSWC	→	NSWCF
NTC-L	→	NTC-LF
NTC-T	→	NTC-T....F
NTHC	→	NTHC....F
NTM	→	NTM....F
NTP	→	NTPF
NTR	→	NTRF
NVS	→	NVS....F
NZO	→	NZO....F

Additional RoHS Documentation;
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or conversion efforts ■ e-mail:
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