

		Material Composition Declaration Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.		This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.						
1752-2 1.1		IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x		Form Type * Distribute		Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Information				
Supplier Information										
Company Name * National Semiconductor		Company Unique ID NATSEMI		Unique ID Authority 04-147-2986		Response Date * 07-21-2011		Response Document ID		
Contact Name * Lorena Dudman		Title - Contact Product Stewardship Eng.		Phone - Contact * 1-408-721-8180		Email - Contact * Green.Project@nsc.com				
Authorized Representative * Lorena Dudman		Title - Representative Product Stewardship Eng.		Phone - Representative * 1-408-721-8180		Email - Representative * Green.Project@nsc.com		Supplier Comments or URL for Additional Information http://www.national.com/analog/quality/green		
	Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type	
		TP3054N-X	TP3054N-X	07-21-2011			1070.00	mg	Each	
	Alternate Recommendation				Alternate Item Comments					
Manufacturing Process Information										
Terminal Plating / Grid Array Material SnPb		Terminal Base Alloy CU Alloy		J-STD-020 MSL Rating 1		Peak Process Body Temperature 260 C		Max Time at Peak Temperature 40 seconds		Number of Reflow Cycles 4
Comments "Does not contain PFOS."										

RoHS Material Type Declaration		Declaration Type * Custom	
RoHS Directive 2002/95/EC	RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium		
<p>Subject to the limitations below, National Semiconductor Corporation ("National") certifies the following information as of the document date.</p> <ol style="list-style-type: none"> 1. National products designated "ROHS Compliant" comply with the European Unions Directive on the Restriction of the Use of Hazardous Substances 2002/95/EC ("RoHS"). Certain National products contain lead in RoHS exempt applications 7a or 7(c)-1. 2. National products do not contain and are not manufactured with ozone depleting compounds. 3. National products do not contain substances identified by the European Chemical Agency ("ECHA") as substances of very high concern ("SVHC") per REACH Regulation (EC) No 1907/2006. National also complies with use restrictions as stipulated in Annex XVII of REACH. 4. National products are manufactured in conformance with National specifications (SC)CSP-9-111C1 Supplier Environmental Requirements for Materials and Products and (SC)CSP-9-111S2 Banned and Reportable Substances. 5. National's list of banned and reportable substances and management system is based on the current version of the Joint Industrial Guide, JIG-101. <p>National has taken commercially reasonable steps to provide representative and accurate information but may not have independently verified information provided or conducted chemical analysis of incoming materials. Equivalent compliant materials may have been substituted for those stated herein. Material concentrations are the maximum expected concentration of the substance in the device and may not represent the actual concentration. National and its suppliers consider certain limited information to be confidential and thus CAS numbers and other limited information may not be available for release. National's Standard Terms and Conditions of Sale apply to any issue arising out of or in connection with the information provided herein unless otherwise provided by a written contract signed by both parties.</p> <p>NATIONAL ACCEPTS NO DUTY TO NOTIFY USERS OF THIS DECLARATION OF UPDATES OR CHANGES TO THIS DECLARATION</p>			
RoHS Declaration *	2 - Item(s) contains RoHS restricted substances per the definition above and is not under exemption	Supplier Acceptance *	Accepted
<p>Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration and above and choose all applicable exemptions.</p>			
Declaration Signature			
Supplier Signature	 John L. Conn Vice President Quality		
	John L. Conn Vice President Quality		

Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name	Homogeneous Material	Weight	Unit of Measure	Level	Substance Category	Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance	PPM
	Plastic	707.669	mg	Requester		SiO2	60676-86-0		489.849	mg		692,200
					Requester	Epoxy Resin	25928-94-3		205.224	mg		290,000
					Requester	Sb2O3	1309-64-4		6.369	mg		9,000
					Requester	Brominated Epoxy	40039-93-8		6.227	mg		8,800
	Leadframe	318.751	mg	Requester		Cu	7440-50-8		310.622	mg		974,500
					Requester	Fe	7439-89-6		7.650	mg		24,000
					Requester	Zn	7440-66-6		0.383	mg		1,200
					Requester	P	7723-14-0		0.096	mg		300
	Ext. LeadFinish	28.620	mg	Requester		Sn	7440-31-5		24.327	mg		850,000
					Requester	Pb	7439-92-1		4.293	mg		150,000
	Chip	12.320	mg	Requester		Si	7440-21-3		12.246	mg		994,000
					Requester	Al	7429-90-5		0.074	mg		6,000
	Die Attach	1.260	mg	Requester		Ag	7440-22-4		0.945	mg		750,000
					Requester	Epoxy Resin	25928-94-3		0.315	mg		250,000
	Int. LeadFinish	0.770	mg	Requester		Ag	7440-22-4		0.770	mg		1,000,000
	Wires	0.610	mg	Requester		Au	7440-57-5		0.610	mg		1,000,000