

		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 * 06-02-2009		Response Document ID			
Contact Name * Elizabeth Cathers		Title - Contact Product Ecology Eng. Mgr		Phone - Contact * 1-408-721-5248		Email - Contact * Green.Project@nsc.com					
Authorized Representative * Elizabeth Cathers		Title - Representative Product Ecology Eng. Mgr		Phone - Representative * 1-408-721-5248		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
		ADC08D1000WG-QV		ADC08D1000WG-QV		06-02-2009			8504.00	mg	Each
Alternate Recommendation							Alternate Item Comments				
Manufacturing Process Information											
Terminal Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MSL Rating		Peak Process Body Temperature		Max Time at Peak Temperature		Number of Reflow Cycles	
NiAu		Kovar		1		260 C		40 seconds		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 5, 7a or 7c. 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"). 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 *	1 - Item(s) does not contain RoHS restricted substances per the definition above	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	 Gerry Edwards 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
	Au Plate	129.000	mg	Requester		Au	7440-57-5		129.000	mg		1,000,000
	Ceramic Body	1817.000	mg	Requester		Al2O3	1344-28-1		1642.132	mg		903,760
				Requester		Cr2O3	1308-38-9		71.390	mg		39,290
				Requester		SiO2	60676-86-0		65.412	mg		36,000
				Requester		TiO2	13463-67-7		18.443	mg		10,150
				Requester		CaO	1305-78-8		10.702	mg		5,890
				Requester		MgO	1309-48-4		8.921	mg		4,910
	Chip	15.800	mg	Requester		Si	7440-21-3		15.705	mg		994,000
				Requester		Al	7429-90-5		0.095	mg		6,000
	Die Attach	14.200	mg	Requester		Ag	7440-22-4		11.360	mg		800,000
				Requester		Lead Borate Glass	65997-18-4		2.840	mg		200,000
	Heat Sink	4593.000	mg	Requester		W	7440-33-7		4133.700	mg		900,000
				Requester		Cu	7440-50-8		459.300	mg		100,000
	Heatsink Finish	202.000	mg	Requester		Ag	7440-22-4		145.440	mg		720,000
				Requester		Cu	7440-50-8		56.560	mg		280,000
	LeadFinish	10.500	mg	Requester		Ag	7440-22-4		8.925	mg		850,000
				Requester		Cu	7440-50-8		1.575	mg		150,000
	Leads	828.000	mg	Requester		Fe	7439-89-6		447.120	mg		540,000
				Requester		Ni	7440-02-0		240.120	mg		290,000
				Requester		Co	7440-48-4		140.760	mg		170,000
	Lid	508.000	mg	Requester		Fe	7439-89-6		269.240	mg		530,000
				Requester		Ni	7440-02-0		150.368	mg		296,000
				Requester		Co	7440-48-4		81.280	mg		160,000

			Requester		Au	7440-57-5		7.112	mg		14,000
Lid Attach	55.400	mg	Requester		Au	7440-57-5		44.320	mg		800,000
			Requester		Sn	7440-31-5		11.080	mg		200,000
Metallization	289.000	mg	Requester		W	7440-33-7		271.371	mg		939,000
			Requester		Mo	7439-98-7		17.629	mg		61,000
Ni Plate	41.100	mg	Requester		Ni	7440-02-0		37.935	mg		923,000
			Requester		Co	7440-48-4		2.836	mg		69,000
			Requester		Pd	7440-05-3		0.288	mg		7,000
			Requester		B	7440-42-8		0.041	mg		1,000
Wires	1.000	mg	Requester		Al	7429-90-5		0.990	mg		990,000
			Requester		Si	7440-21-3		0.010	mg		10,000