

		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	
		LM117E/883	LM117E/883	06-02-2009			466.05	mg	Each	
	Alternate Recommendation				Alternate Item Comments					
Manufacturing Process Information										
Terminal Plating / Grid Array Material SnPb		Terminal Base Alloy Not Applicable		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
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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
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Subject to the limitations below, National Semiconductor Corporation ("National") certifies the following information as of the document date.

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.

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.

NATIONAL ACCEPTS NO DUTY TO NOTIFY USERS OF THIS DECLARATION OF UPDATES OR CHANGES TO THIS DECLARATION

RoHS Declaration * 2 - Item(s) contains RoHS restricted substances per the definition above and is not under exemption	Supplier Acceptance *	Accepted
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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.

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
	Ceramic Body	305.400	mg	Requester		Al2O3	1344-28-1		276.008	mg		903,760
				Requester		Cr2O3	1308-38-9		11.999	mg		39,290
				Requester		SiO2	60676-86-0		10.994	mg		36,000
				Requester		TiO2	13463-67-7		3.100	mg		10,150
				Requester		CaO	1305-78-8		1.799	mg		5,890
				Requester		MgO	1309-48-4		1.500	mg		4,910
Chip		3.900	mg	Requester		Si	7440-21-3		3.877	mg		994,000
				Requester		Al	7429-90-5		0.023	mg		6,000
Die Attach		3.770	mg	Requester		Ag	7440-22-4		3.016	mg		800,000
				Requester		Lead Borate Glass	65997-18-4		0.754	mg		200,000
Lid		116.800	mg	Requester		Fe	7439-89-6		61.904	mg		530,000
				Requester		Ni	7440-02-0		34.573	mg		296,000
				Requester		Co	7440-48-4		18.688	mg		160,000
				Requester		Au	7440-57-5		1.635	mg		14,000
Lid Attach		13.200	mg	Requester		Au	7440-57-5		10.560	mg		800,000
				Requester		Sn	7440-31-5		2.640	mg		200,000
Metallization		22.870	mg	Requester		W	7440-33-7		19.000	mg		830,800
				Requester		Au	7440-57-5		1.999	mg		87,400
				Requester		Ni	7440-02-0		1.601	mg		70,000
				Requester		Co	7440-48-4		0.270	mg		11,800
Wires		0.107	mg	Requester		Al	7429-90-5		0.106	mg		990,000
				Requester		Si	7440-21-3		0.001	mg		10,000