

<b>Company</b>		<b>DUNS#</b>	<b>URL For Additional Information</b>
National Semiconductor		04-147-2986	<a href="http://www.national.com/analog/quality/green">http://www.national.com/analog/quality/green</a>

<b>Contact</b>	<b>Title</b>	<b>Phone</b>	<b>Email</b>
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<b>Part Number</b>	<b>MSL Rating</b>	<b>Peak Body Temp C</b>	<b>MaxTime(Sec)</b>	<b>Cycles</b>	<b>Unit Type</b>
ADC10D1000CIUT NOPB	3	250	30	4	Each

<b>Document Date</b>	European RoHS Compliant. China RoHS Compliant.	<b>Weight (mg)</b>	Does NOT Contain Halogens
10-27-2011		4019.26	

### Material Composition Declaration for Electronic Products

Item	Weight (mg)	Component	CAS#	Weight (mg)	Item-ppm	Part-ppm
Plastic	936.000	SiO2	60676-86-0	842.400	900,000	209,591
		Epoxy Resin	25928-94-3	93.600	100,000	23,288
Chip	57.890	Si	7440-21-3	57.543	994,000	14,317
		Al	7429-90-5	0.347	6,000	86
Wires	5.810	Au	7440-57-5	5.810	1,000,000	1,446
Die Attach	5.660	Ag	7440-22-4	4.245	750,000	1,056
		Epoxy Resin	25928-94-3	1.415	250,000	352
Solder Balls	499.901	Sn	7440-31-5	482.404	965,000	120,023
		Ag	7440-22-4	17.497	35,000	4,353
Substrate	1324.000	Cu	7440-50-8	884.962	668,400	220,180
		BT	N/A	356.686	269,400	88,744
		Solder Mask	N/A	72.820	55,000	18,118
		Ni	7440-02-0	8.182	6,180	2,036
		Au	7440-57-5	1.350	1,020	336
Heat Spreader	1190.000	Cu	7440-50-8	1174.530	987,000	292,225
		Cr	7440-47-3	15.470	13,000	3,849

**Note:** The device content disclosed herewith is approximate and is based on engineering estimates only. It has not been verified through analytical testing.

Additionally, the following should be noted:

- One or more dopant materials may be present in the silicon die at sub-ppm levels to provide semiconductor properties.
- Epoxy resin components listed are generic and may or may not be the specific compound used, which is considered proprietary.

### RoHS Material Composition Declaration

<b>RoHS Directive 2002/95/EC</b>	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.

- 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 7(a) or 7(c)-1.
- National products do not contain and are not manufactured with ozone depleting compounds.
- 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.
- 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.
- 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.

  
John L. Conn  
Vice President Quality

**John L. Conn**  
Vice President Quality

**Banned Substance Monitoring**

<b>Part Number</b>	<b>Document Date</b>
ADC10D1000CIUT NOPB	10-27-2011

European RoHS Compliant.

China RoHS Compliant.

<b>Item#</b>	<b>Material</b>	<b>Cd</b>	<b>CrVI</b>	<b>Pb</b>	<b>Hg</b>	<b>PBB</b>	<b>PBDE</b>	<b>Cl</b>	<b>Br</b>	<b>Ref#</b>
1	CHIP	<1	<1	<1	<30	<10	<10	<75	<50	1000
2	DIEATTACH	<2	<2	<2	<2	<5	<5	70	<50	625
3	WIRE	<2	N/D	<2	<2	<5	<5	N/A	N/A	132

\* Cd: Cadmium, CrVI: Hexavalent Chromium, Pb: Lead, Hg: Mercury, NA: Not Applicable

\* Unless otherwise noted, units are in PPM (parts-per-million)

<b>Ref#</b>	<b>3rd Party Analysis</b> (available upon request, subject to a non-disclosure agreement)
1000	Analysis on 01/24/2011 by Balazs as per Report# 11-00322-00
625	Analysis on 04/29/2011 by SGS per Report# LPCI/04436(B)/11
132	Analysis on 04/29/2011 by SGS per Report# LPCI/04465(B)/11