

Current Production Information							
TI Part Number		OPA2725AID		Assembly Site		Ext-Mfg	
Lead/Ball Finish		CU NIPDAU		Package Type / Pins		D 8	
Planned Lead/Ball Finish				Package Body Size (WxLxH) mm		3.90x4.89x1.47	
MSL / Reflow Ratings		Level-2-260C-1 YEAR		Total Device Mass (mg)		74.3664289999997	
Environmental Ratings Information							
Part Number Type		Std		JIG Material Content Compliance		Level A & B	
RoHS & High-Temp Compliant		Y		Green Compliant		Y	
Pb-Free (RoHS) Conversion Date		01-Jan-2005 (DC 0501)		Green Conversion Date		01-Jan-2005 (DC 0501)	
Pb-Free (RoHS) Available Supply Date		06-Nov-2006		Green Available Supply Date		06-Nov-2006	
Component Information							
Component	Substance	CAS Number	Amount (mg)	Homogeneous Material Level		Component Level	
				Percentage %	ppm	Percentage %	ppm
Bond Wire							
Metallurgy	Gold	7440-57-5	0.29997	99.998	999979	0.4034	4033
Trace Metal	Beryllium	7440-41-7	0.000002	0.0007	6	0	0
Trace Metal	Copper	7440-50-8	0.000002	0.0007	6	0	0
Trace Metal	Silver	7440-22-4	0.000002	0.0007	6	0	0
Sub-Total			0.299976	100	1000000	0.4034	4033
Die Attach Adhesive							
Conductive Material	Silver	7440-22-4	0.848957	69	690000	1.1416	11415
Non Conductive Material	Silica	60676-86-0, 14808-60-7	0.024607	2	19999	0.0331	330
Polymer	Epoxy		0.184556	15	150000	0.2482	2481
Polymer	Proprietary Resin		0.123037	10	99999	0.1654	1654
Reactive Diluent	Proprietary Material		0.049215	4	40000	0.0662	661
Sub-Total			1.230372	100	1000000	1.6545	16541
Lead Frame							
Base Metal	Copper	7440-50-8	23.343031	97.425	974250	31.3892	313892
Base Metal	Iron	7439-89-6	0.57504	2.4	23999	0.7733	7732
Base Metal	Lead	7439-92-1	0.007188	0.03	299	0.0097	96
Base Metal	Phosphorus	7723-14-0	0.003594	0.015	149	0.0048	48
Base Metal	Tin	7440-31-5	0.007188	0.03	299	0.0097	96
Base Metal	Zinc	7440-66-6	0.02396	0.1	999	0.0322	322
Sub-Total			23.960001	100	1000000	32.2188	322186
Lead Frame Plating							
Plating	Gold	7440-57-5	0.01198	2.5	25000	0.0161	161
Plating	Nickel	7440-02-0	0.43128	90	900000	0.5799	5799
Plating	Palladium	7440-05-3	0.03594	7.5	75000	0.0483	483
Sub-Total			0.4792	100	1000000	0.6444	6443
Mold Compound							
Coloring	Carbon Black	1333-86-4	0.137301	0.3	3000	0.1846	1846
Filler	Fused Silica	60676-86-0	38.901847	85	849999	52.311	523110
Hardener	Proprietary Hardener		2.288344	5	50000	3.0771	30771
Other additives	Catalyst Mold Release Adhesion Agent		1.235706	2.7	27000	1.6616	16616
Polymer	Biphenyl Epoxy		2.288344	5	50000	3.0771	30771
Polymer	Cresol Novolac Epoxy		0.915338	2	20000	1.2308	12308
Sub-Total			45.76688	100	1000000	61.5424	615422
Semiconductor Device							
Silicon Chip	Doped Silicon	7440-21-3	2.63	100	1000000	3.5365	35365
Sub-Total			2.63	100	1000000	3.5365	35365
Total			74.366429			100	1000000

Important Part Information

There is a remote possibility the Customer Part Number (CPN) your company uses could reference more than one TI part number. This is due to two or more users (EMSI's or subcontractors) using the same CPN for different TI part numbers. If this occurs, please check your Customer Part Number and cross reference it with the TI part number seen on this page.

Product Content Methodology

[For an explanation of the methods used to determine material weights. See Product Content Methodology.](#)

Material Declaration Certificate for Semiconductor Products

TI certifies that the material content information provided by TI as of the date of disclosure is representative and accurate. TI semiconductor products designated by TI as "Pb-Free" or "Green" (defined below) do not exceed any of the Joint Industry Guide (JIG) Level-A Substance thresholds and are compliant with the requirements of the European Union's Restriction on Use of Hazardous Substances ("RoHS") Directive, 2002/95/EC.

For TI semiconductor products NOT designated as "Pb-Free" or "Green", these products are RoHS compliant with the exception of Lead (Pb) which may be found in the leadframe plating or solder balls, or in RoHS exempt applications such as high-temperature solder die attach (exemption 7a) and flip-chip solder bumps (exemption 15). This situation is known as RoHS-5 or "5 of 6" compliant.

JIG Level-A Banned Substances	Threshold, Homogeneous Level (1)
Asbestos	Not intentionally added
Azo colorants	Not intentionally added
RoHS - Cadmium/Cadmium Compounds	75 ppm, Not intentionally added (RoHS threshold = 100ppm)
RoHS - Hexavalent Chromium/Hex.Chromium.Compounds	1000 ppm, Not intentionally added
RoHS - Lead/Lead Compounds	1000 ppm, Not intentionally added
RoHS - Mercury/Mercury Compounds	1000 ppm, Not intentionally added
Ozone Depleting Substances	Class I : Not intentionally added Class II : 1000ppm
RoHS - Polybrominated Biphenyls (PBBs)	1000 ppm, Not intentionally added
RoHS - Polybrominated Diphenyl Ethers (PBDEs)	1000 ppm, Not intentionally added
Polychlorinated Biphenyls (PCBs)	1000 ppm, Not intentionally added
Polychlorinated Naphthalenes (>3 Chlorine atoms)	1000 ppm, Not intentionally added
Radioactive Substances	1000 ppm, Not intentionally added
Shortchain Chlorinated Paraffins	1000 ppm, Not intentionally added
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	1000 ppm, Not intentionally added
Tributyl Tin Oxide (TBTO)	1000 ppm, Not intentionally added

(1) Threshold does not apply to applications covered by a RoHS substance exemption.

Regarding the EU Directive 2004/12/EC concerning Packaging and Packaging Waste, TI's packing materials (boxes, trays, etc) comply with the directive's requirement that the total concentration of the 4 heavy metals (cadmium, hexavalent chromium, lead, and mercury) must not exceed 100 ppm. Material content details for TI's packing materials are available at www.ti.com/ecoinfo.

TI bases its material content knowledge on information provided by third parties and has taken and continues to take commercially reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain limited information to be proprietary, and thus CAS numbers and other limited information may not be available for release. TI's standard warranty and limitation of liability provisions of TI's Standard Terms and Conditions (available at <http://www.ti.com/sc/docs/stdterms.htm>) apply to the representations herein unless otherwise provided by a written contract or other agreement signed by the parties.

Signature: [\(click here for signed certificate\)](#)

Name/Title: Cindy Allen, Vice President, Worldwide Quality

Date: September 27, 2006

Pb-Free: TI defines "Pb-Free" or "RoHS Compliant" to mean semiconductor products that are compliant with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials unless exempt. Where designed to be soldered at high temperatures, TI "Pb-Free" and "RoHS Compliant" products are suitable for use in specified lead-free processes.

Green: TI defines "Green" to mean Pb-Free/RoHS Compliant and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material).