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Search results for "TLV2772CDR"

Current Production Information			
TI Part Number	TLV2772CDR	**Assembly Site**	TI AGUASCALIENTES
Lead/Ball Finish	CU NIPDAU	**Package Type / Pins**	D | 8
Planned Lead/Ball Finish		**Package Body Size (WxLxH) mm**	3.91x4.9x1.58
MSL / Reflow Ratings	Level-1-260C-UNLIM	**Total Device Mass (mg)**	72.619993
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	15-Feb-2004 (DC 0408)	**Green Conversion Date**	16-May-2005 (DC 0521)
Pb-Free (RoHS) Available Supply Date	11-May-2005	**Green Available Supply Date**	11-May-2005

Component Information

				Homogeneous Material Level		**Component Level**	
Component	**Substance**	**CAS Number**	**Amount (mg)**	**Percentage %**	**ppm**	**Percentage %**	**ppm**
Bond Wire							
Metallurgy	Gold	7440-57-5	0.109989	99.9973	999972	0.1515	1514
Trace Metal	Beryllium	7440-41-7	0.000001	0.0009	9	0	0
Trace Metal	Calcium	7440-70-2	0.000001	0.0009	9	0	0
Trace Metal	Silver	7440-22-4	0.000001	0.0009	9	0	0
Sub-Total			**0.109992**	**100**	**1000000**	**0.1515**	**1514**
Die Attach Adhesive							
Conductive Material	Silver	7440-22-4	0.0158	79	790000	0.0218	217
Polymer	Bismaleimide		0.0026	13	130000	0.0036	35
Polymer	Proprietary Resin		0.0012	6	59999	0.0017	16
Reactive Diluent	Proprietary Material		0.0004	2	20000	0.0006	5
Sub-Total			**0.02**	**100**	**1000000**	**0.0275**	**273**
Lead Frame							
Base Metal	Copper	7440-50-8	24.025981	97.425	974250	33.0845	330845
Base Metal	Iron	7439-89-6	0.591864	2.4	23999	0.815	8150
Base Metal	Lead	7439-92-1	0.007398	0.03	299	0.0102	101
Base Metal	Phosphorus	7723-14-0	0.003699	0.015	149	0.0051	50
Base Metal	Tin	7440-31-5	0.007398	0.03	299	0.0102	101
Base Metal	Zinc	7440-66-6	0.024661	0.1	999	0.034	339
Sub-Total			**24.661001**	**100**	**1000000**	**33.959**	**339586**
Lead Frame Plating							
Plating	Gold	7440-57-5	0.000304	0.7795	7794	0.0004	4
Plating	Nickel	7440-02-0	0.037097	95.1205	951205	0.0511	510
Plating	Palladium	7440-05-3	0.001599	4.1	41000	0.0022	22
Sub-Total			**0.039**	**100**	**1000000**	**0.0537**	**536**
Mold Compound							
Coloring	Carbon Black	1333-86-4	0.1425	0.3	3000	0.1962	1962
Filler	Fused Silica	60676-86-0	36.1	76	760000	49.7108	497108
Flame Retardant Additive	Proprietary Non Halide		1.6625	3.5	35000	2.2893	22893
Hardener	Phenolic Novolac		3.5625	7.5	75000	4.9057	49056
Other additives	Catalyst Mold Release Adhesion Agent		1.7575	3.7	37000	2.4201	24201
Polymer	Cresol Novolac Epoxy		3.5625	7.5	75000	4.9057	49056
Stress Relief Agent	Proprietary		0.7125	1.5	15000	0.9811	9811
Sub-Total			**47.5**	**100**	**1000000**	**65.409**	**654087**
Semiconductor Device							
Silicon Chip	Doped Silicon	7440-21-3	0.29	100	1000000	0.3993	3993
Sub-Total			**0.29**	**100**	**1000000**	**0.3993**	**3993**
Total			**72.619993**			**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 (EMSIs 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, SeeProduct 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).