Environmental Management and Materials Information

Product Content Information for: DS2760AE

Links
Qualifications
Package Description
Chemical Composition Summary
Detailed Package Component Data
Other Component Data

Qualifications Top	
Lead-Free Qualified	No
REACH	Yes: 2014-12-17
RoHS Qualified	No
Green	No
Moisture Sensitivity Level	L1
Flammability Meets UL-94 (V-0 Rating)	Yes
Assembler Qualified	ATP

Package Description Top	
Package Code	U16-1
Package Type	TSSOP *
Package Description	Thin Shrink Small-Outline Package
Package Option	Standard
Footprint Area (mm^2)	33.4
Body Size	4.4
Pin Count	16
Unit Weight in Grams	0.058500

Chemical Composition Summary Top

Maxim NIA/NIU Substance List (PDF, 24k)

Substance	CAS Number		

		Amount (grams)	% of Unit Weight
Aluminum (Al)	7429-90-5	0	0
Antimony (Sb_2O_3)	1309-64-4	0.00014	0.23932
BCB Resin		0	0
Bromine (Br)	7726-95-6	9.7e-05	0.16581
Carbon (C)	7440-44-0	0	0
Carbon Black	1333-86-4	0	0
Ceramic ($BaTiO_3$)	12047-27-7	0	0
Chromium (Cr)	7440-47-3	0	0
Cobalt (Co)	7440-48-4	0	0
Copper (Cu)	7440-50-8	0.0217	37.09402
Gold (Au)	7440-57-5	0.0006	1.02564
Indium (In)	7440-74-6	0	0
Insulator (Polyimide)		0	0
Insulator Film		0	0
Iron (Fe)	7439-89-6	0	0
FeO_2	12411-15-36	0	0
Lead (Pb)	7439-92-1	0.00032	0.54701
Magnesium (Mg)	7439-95-4	3.4e-05	0.05812
Manganese (Mn)	7439-96-5	0	0
MnO_3		0	0
Nickel (Ni)	7440-02-0	0.00068	1.16239
NiPdAu		0	0
Nickel-V (NiV)		0	0
Palladium (Pd)	7440-05-3	0	0
Phosphorus (P)	7723-14-0	0	0
Silica (SiO_2)	11126-22-0	0.0234	40.00000
Silicon (Si)	7440-21-3	0.0041	7.00855
Silver (Ag)	7440-22-4	0.0013	2.22222
Solder Mask		0	0
Solder Paste		0	0
Spheron Polymer Passivation		0	0
Sulfur (S)	7704-34-9	0	0
Tin (Sn)	7440-31-5	0.0018	3.07692
Titanium (Ti)	7440-32-6	0	0
Titanium-W (TiW)		0	0

Tungsten (W)	7440-33-7	0	0
Vanadium (V)	7440-62-2	0	0
Zinc (Zn)	7440-66-6	0	0
ZnO	1314-13-2	0	0
Zirconium (Zr)	7440-67-7	0	0

Detailed Package Component Data Top

Bond Wire Components

Summary	
Component Weight	0.0006

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Gold (Au)	0.000600	100.00000	1.02564
Aluminum (Al)	0	0	0

Die Attach Epoxy Components

Summary	
Die Attach Material	AB8290
Component Weight	0.0015

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Aromatic Amine		0	0
Copper (Cu)	0	0	0
Diester	0	0	0
Epoxy	0.000200	13.33333	0.34188
Functionalized Ester	0	0	0
Functionalized Urethane	0	0	0
Indium (In)	ND	0	0
Lactone	0	0	0
Lead (Pb)	ND	0	0
Polymeric	0	0	0
Polyoxypropylenediamine	0	0	0
Resin	0	0	0
Silver Filler (Ag)	0.001300	86.66667	2.22222
Tin (Sn)	0	0	0
Other	0	0	0

Lead Finish/Plating Components

Summary			
Lead Finish Plating			85Sn/15Pb
Assembly Lead Finish Process			
Component Weight			0.00212

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Lead (Pb)	0.00032	15.09434	0.54701
Tin (Sn)	0.00180	84.90566	3.07692
NiPdAu		0	0
Gold (Au)		0	0
Nickel (Ni)		0	0

Lead Frame Components

Summary			
Lead Frame Material			Copper C7025
Component Weight			0.022414

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Aluminum (Al)		0	0
Carbon (C)		0	0
Chromium (Cr)		0	0
Cobalt (Co)		0	0
Copper (Cu)	0.021700	96.81449	37.09402
Gold (Au)		0	0
Iron (Fe)	ND	0	0
Lead (Pb)		0	0
Magnesium (Mg)	0.000034	0.15169	0.05812
Manganese (Mn)		0	0
Nickel (Ni)	0.000680	3.03382	1.16239
Palladium (Pd)		0	0
Phosphorus (P)		0	0
Silicon (Si)		0	0
Silver (Ag)		0	0
Sulfur (S)		0	0
Tin (Sn)		0	0
Zinc (Zn)		0	0

Zirconium (Zr)		0	0

Mold Compound Components

Summary	
Mold Material	G700K
Resin Type	Bi-phenyl
Component Weight	0.027737

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Antimony (Sb_2O_3)	0.000140	0.50474	0.23932
Bromine (Br)	0.000097	0.34971	0.16581
Carbon Black		0	0
Epoxy	0	0	0
Epoxy Cresol Novolac		0	0
Metal Hydroxide		0	0
Phenol Novolac		0	0
Silica (SiO_2)	0.023400	84.36385	40.00000
Resin	0.00410	14.78170	7.00855
Other		0	0

Silicon Chip Components

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Silicon Chip	0.00410	100	7.00855

Substrate Components

Summary	
Substrate Weight	
Substrate Material	
Substrate Core Material	
Bromine-Free	

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Copper		0	0
Gold		0	0
Nickel		0	0
Substrate Core Material		0	0
Solder Mask		0	0

Triazol	0	0	0
Other	0	0	0

Other Component Data Top

Crystal Components

Summary

Component Weight

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Silver (Ag)		0	0
Aluminum (Al)	0	0	0
Gold (Au)		0	0
Chromium (Cr)	0	0	0
Lead (Pb)		0	0
Manganese (Mn)	0	0	0
Nickel (Ni)	0	0	0
Cobalt (Co)	0	0	0
Copper (Cu)		0	0
Iron (Fe)	0	0	0
Silicon (Si)	0	0	0
Tin (Sn)	0	0	0
Zinc (Zn)	0	0	0
Silica (SiO_2)	0	0	0

Notes:

1. Lead Form: GW - Gull Wing, TH - Through Hole.
2. Refer to product data sheet to confirm actual wire diameter.
3. 'ND' means None Detected, negligible amount present.

* This package may be remarked. If remarked, the package will contain additional homogeneous materials—inks—that are not listed in contents of this report.

This part is not qualified as lead-free.

Parts not currently qualified as lead-free may not have been qualified as such due to low demand. Also, some packages types cannot be produced as lead-free for technical reasons. If a customer requires that a package type "not qualified" as lead-free be manufactured and supplied, a request must be submitted to your Maxim sales contact person for approval. The navigation bar on the EMMI website contains information regarding the lead-free process (e.g. MSL's, Peak reflow Temperatures, JEDEC methods, frequently asked questions and answers, lead-free package tables, and status/qualification plans for particular package types qualified as lead-free or in the qualification process).

See a list of packages qualified as lead-free.

This report was generated on 2015-06-24. For additional information, please visit the Maxim/Dallas Environmental Management and Materials Information website located at:

http://www.maximintegrated.com/en/emmi