

Environmental Management and Materials Information

Product Content Information for: MAX6805US31D3-T

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Qualifications [Top](#)

Lead-Free Qualified	No
REACH	Yes: 2014-06-16
RoHS Qualified	No
Green	No
Moisture Sensitivity Level	L1
Flammability Meets UL-94 (V-0 Rating)	Yes
Assembler Qualified	Unisem

Package Description [Top](#)

Package Code	U4-1
Package Type	SOT *
Package Description	Small-Outline Transistor Package
Package Option	Standard
Footprint Area (mm²)	8
Pin Count	4
Lead Form¹	GW
Unit Weight in Grams	0.01062

Chemical Composition Summary [Top](#)

[Maxim NIA/NIU Substance List \(PDF, 24k\)](#)

Substance	CAS Number	Amount (grams)	% of Unit Weight
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Aluminum (Al)	7429-90-5	0	0
Antimony (Sb ₂ O ₃)	1309-64-4	6.2e-05	0.58380
BCB Resin		0	0
Bromine (Br)	7726-95-6	3.1e-05	0.29190
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	0.00574	54.04896
Gold (Au)	7440-57-5	8e-05	0.75330
Indium (In)	7440-74-6	0	0
Insulator (Polyimide)		0	0
Insulator Film		0	0
Iron (Fe)	7439-89-6	0.000137	1.29002
FeO ₂	12411-15-36	0	0
Lead (Pb)	7439-92-1	6e-05	0.56497
Magnesium (Mg)	7439-95-4	0	0
Manganese (Mn)	7439-96-5	0	0
MnO ₃		0	0
Nickel (Ni)	7440-02-0	0	0
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	0.0025	23.54049
Silicon (Si)	7440-21-3	0.001	9.41620
Silver (Ag)	7440-22-4	0.0001	0.94162
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	0.00034	3.20151
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	1e-05	0.09416
ZnO	1314-13-2	0	0
Zirconium (Zr)	7440-67-7	0	0

Detailed Package Component Data [Top](#)

Bond Wire Components

Summary

Component Weight 8e-05

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Gold (Au)	8e-05	100.00000	0.75330
Aluminum (Al)	0	0	0

Die Attach Epoxy Components

Summary

Die Attach Material 84-1LMISR4

Component Weight 0.00012

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Aromatic Amine		0	0
Copper (Cu)	0	0	0
Diester	0	0	0
Epoxy	2e-05	16.66667	0.18832
Functionalized Ester	0	0	0
Functionalized Urethane	0	0	0
Indium (In)	0	0	0
Lactone	0	0	0
Lead (Pb)	0	0	0
Polymeric	0	0	0
Polyoxypropylenediamine	0	0	0
Resin	0	0	0
Silver Filler (Ag)	0.0001	83.33333	0.94162
Tin (Sn)	0	0	0
Other		0	0

Lead Finish/Plating Components

Summary

Lead Finish Plating

85Sn/15Pb plate

Assembly Lead Finish Process

Component Weight

0.0004

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Lead (Pb)	6e-05	15.00000	0.56497
Tin (Sn)	0.00034	85.00000	3.20151
NiPdAu	0	0	0
Gold (Au)	0	0	0
Nickel (Ni)	0	0	0

Lead Frame Components

Summary

Lead Frame Material

Copper C194

Component Weight

0.005887

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Aluminum (Al)	0	0	0
Carbon (C)	0	0	0
Chromium (Cr)	0	0	0
Cobalt (Co)		0	0
Copper (Cu)	0.00574	97.50297	54.04896
Gold (Au)		0	0
Iron (Fe)	0.000137	2.32716	1.29002
Lead (Pb)		0	0
Magnesium (Mg)	ND	0	0
Manganese (Mn)		0	0
Nickel (Ni)	ND	0	0
Palladium (Pd)	0	0	0
Phosphorus (P)		0	0
Silicon (Si)		0	0
Silver (Ag)		0	0
Sulfur (S)	0	0	0
Tin (Sn)		0	0
Zinc (Zn)	1e-05	0.16987	0.09416
Zirconium (Zr)	0	0	0

Mold Compound Components

Summary

Mold Material	G600
Resin Type	OCN
Component Weight	0.003133

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Antimony (Sb ₂ O ₃)	6.2e-05	1.97893	0.58380
Bromine (Br)	3.1e-05	0.98947	0.29190
Carbon Black		0	0
Epoxy	0	0	0
Epoxy Cresol Novolac	0	0	0
Metal Hydroxide		0	0
Phenol Novolac		0	0
Silica (SiO ₂)	0.0025	79.79572	23.54049
Resin	0.00054	17.23588	5.08475
Other		0	0

Silicon Chip Components

Substance	Amount (grams)	% of Component Weight	% of Unit Weight
Silicon Chip	0.001	100	9.41620

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 2015-02-24. For additional information, please visit the Maxim/Dallas Environmental Management and Materials Information website located at:

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