PART INFORMATION

Mfg Item Number	MC68F375BGMZP33
Mfg Item Name	PBGA 217 23*23*1.25P1.27

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2014-12-31
Response Document ID	5069A1.20
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
Contact Phone	1-800-521-6274
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Authorized Representative	Daniel Binyon
Representative Title	EPP Customer Response
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URL for Additional Information	www.freescale.com

DECLARATION

EU RoHS	No
Pb Free	No
HalogenFree	Yes
Plating Indicator	e0
EU RoHS Exemption(s)	15

MANUFACTURING

Mfg Item Number	MC68F375BGMZP33
Mfg Item Name	PBGA 217 23*23*1.25P1.27
Version	ALL
Weight	2.168350
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	3
Peak Processing Temperature	220 C
Max Time at Peak Temperature	30 seconds
Number of Processing Cycles	3

RoHS	
RoHS Directive	2011/65/EU
RoHS Definition	RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) of 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 of Cadmium
RoHS Legal Definition	Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part(s) identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a RoHS restricted substance) in excess of the applicable quantity limit identified below. If a homogeneous material within the part(s) contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s),the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Suppliers liability and the Companys remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Suppliers Standard Terms and Conditions of Sale applicable to such part(s) shall apply.
RoHS Declaration	3 - Item(s) does not contain RoHS restricted substances per the definition above except for lead in solders and selected exemptions, if any
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemption List Version	2012/51/EU
	15:Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages
List of Freescale Accepted Exemptions	6(a) : Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight
	6(b) : Lead as an alloying element in aluminium containing up to 0.4% lead by weight
	6(c) : Copper alloy containing up to 4% lead by weight
	7(a) : Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)
	7(b) : Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission, and network management for telecommunications
	7(c)-I : Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound
	7(c)-II : Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher
	7(c)-III : Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC
	7(c)-IV : Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors
	15 : Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages

MATERIAL COMPOSITION

Homogeneous Material	Weight	SubstanceClass	Substance	CAS	Exemption	SubstanceWeight	UoM	SubPart PPM	SubPart%	ARTICLEPPM	ARTICLE%
Die Encapsulant	0.9067						g				
Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.0280134	g	30896	3.0896	12919	1.2919
Die Encapsulant		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00000091	g	1	0.0001	0	0
Die Encapsulant		Cadmium/Cadmium Compounds	Cadmium	7440-43-9		0.00000091	g	1	0.0001	0	0
Die Encapsulant		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.0280134	g	30896	3.0896	12919	1.2919
Die Encapsulant		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0028017	g	3090	0.309	1292	0.1292
Die Encapsulant		Lead/Lead Compounds	Lead	7439-92-1		0.00000091	g	1	0.0001	0	0
Die Encapsulant		Solvents, additives, and other materials	Other organic phosphorous compounds	-		0.0028017	g	3090	0.309	1292	0.1292
Die Encapsulant		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.0513573	g	56642	5.6642	23684	2.3684
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.79370977	g	875383	87.5383	366063	36.6063
Epoxy Die Attach	0.0144						g				
Epoxy Die Attach		Solvents, additives, and other materials	1,3,5-Triazine-2,4-diamine, 6-[2-(2-methyl-1H-imidazol-1-yl)ethyl]	38668-46-1		0.00012169	g	8451	0.8451	56	0.0056
Epoxy Die Attach		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.00186594	g	129579	12.9579	860	0.086
Epoxy Die Attach		Plastics/polymers	4,4'-Dihydroxydiphenyl	92-88-6		0.00012169	g	8451	0.8451	56	0.0056
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.01229068	g	853519	85.3519	5668	0.5668
Bonding Wire	0.012						g				
Bonding Wire		Metals	Gold, metal	7440-57-5		0.012	g	1000000	100	5534	0.5534
Solder Balls - Low Lead	0.4944						g				
Solder Balls - Low Lead		Metals	Aluminum, metal	7429-90-5		0.00000396	g	8	0.0008	1	0.0001
Solder Balls - Low Lead		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.00000346	g	7	0.0007	1	0.0001
Solder Balls - Low Lead		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00000989	g	20	0.002	4	0.0004
Solder Balls - Low Lead		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00000544	g	11	0.0011	2	0.0002
Solder Balls - Low Lead		Metals	Copper, metal	7440-50-8		0.00000494	g	10	0.001	2	0.0002
Solder Balls - Low Lead		Metals	Iron, metal	7439-89-6		0.0000084	g	17	0.0017	3	0.0003
Solder Balls - Low Lead		Lead/Lead Compounds	Lead	7439-92-1		0.1779929	g	360018	36.0018	82086	8.2086
Solder Balls - Low Lead		Nickel (external applications only)	Nickel	7440-02-0		0.00001829	g	37	0.0037	8	0.0008
Solder Balls - Low Lead		Metals	Silver, metal	7440-22-4		0.00984746	g	19918	1.9918	4541	0.4541
Solder Balls - Low Lead		Metals	Tin, metal	7440-31-5		0.3065018	g	619947	61.9947	141352	14.1352
Solder Balls - Low Lead		Metals	Zinc, metal	7440-66-6		0.00000346	g	7	0.0007	1	0.0001
High Pb Bumped Semiconductor D	0.03695				15		g				
High Pb Bumped Semiconductor D		Lead/Lead Compounds	Lead	7439-92-1		0.00020544	g	5560	0.556	94	0.0094
High Pb Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.000347	g	9391	0.9391	160	0.016
High Pb Bumped Semiconductor D		Metals	Titanium, metal	7440-32-6		0.00000026	g	7	0.0007	0	0
High Pb Bumped Semiconductor D		Metals	Tungsten, metal	7440-33-7		0.00000155	g	42	0.0042	0	0
High Pb Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00072792	g	19700	1.97	335	0.0335
High Pb Bumped Semiconductor D		Glass	Silicon, doped	-		0.03566783	g	965300	96.53	16449	1.6449
Organic Substrate	0.7039						g				
Organic Substrate		Solvents, additives, and other materials	Acrylonitrile/Butadiene copolymer, carboxyl terminated (26/74)	68891-46-3		0.00479567	g	6813	0.6813	2211	0.2211
Organic Substrate		Metals	Barium sulfate	7727-43-7		0.04450689	g	63229	6.3229	20525	2.0525
Organic Substrate		Metals	Copper, metal	7440-50-8		0.07398974	g	105114	10.5114	34122	3.4122
Organic Substrate		Plastics/polymers	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3		0.00420651	g	5976	0.5976	1939	0.1939
Organic Substrate		Plastics/polymers	4,4'-dihydroxy-3,3',5,5'-tetramethylbiphenyl digycidyl ether	85954-11-6		0.02551426	g	36247	3.6247	11766	1.1766
Organic Substrate		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.24196422	g	343748	34.3748	111589	11.1589
Organic Substrate		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.0072741	g	10334	1.0334	3354	0.3354
Organic Substrate		Metals	Gold, metal	7440-57-5		0.00133178	g	1892	0.1892	614	0.0614
Organic Substrate		Solvents, additives, and other materials	Silicon	7440-21-3		0.00057509	g	817	0.0817	265	0.0265
Organic Substrate		Nickel (external applications only)	Nickel	7440-02-0		0.01350784	g	19190	1.919	6229	0.6229
Organic Substrate		Glass	Fibrous-glass-wool	65997-17-3		0.22983391	g	326515	32.6515	105994	10.5994
Organic Substrate		Plastics/polymers	Other acrylic resins	-		0.03383999	g	48075	4.8075	15606	1.5606
Organic Substrate		Plastics/polymers	Other acrylic/epoxy resin mixture	-		0.02256	g	32050	3.205	10404	1.0404

LINKS	
MCD LINK	
Freescale website	http://www.freescale.com
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescale_Response.pdf
China RoHS	http://www.freescale.com/chinarohs
REACH signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescale_Response.pdf
ELV signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescale_Reponse.pdf
Conflict Minerals statement	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescale_Response.pdf
FREESCALE ENVIRONMENTAL INFORMATION	
EPP website	http://www.freescale.com/epp
FAQ	http://www.freescale.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ
Technical Service Request	https://www.freescale.com/webapp/servicerequest.create_SR.framework?defaultCategory=Hardware Product Support&defaultTopic=Environmentally Preferred Prod
LINKS TO BLANK IPC1752 FORMS	
Blank IPC1752 v1.1 Form	http://www.freescale.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

IPC1752 XML LINKS

http://www.freescale.com/mcds/MC68F375BGMZP33_IPC1752_v11.xml

http://www.freescale.com/mcds/MC68F375BGMZP33_IPC1752A.xml