

PART INFORMATION

Mfg Item Number	MCIMX508CZK8B
Mfg Item Name	POPBGA 416 13*13*0.9 P.5

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-08-23
Response Document ID	008KA1.4
Contact Name	Freescale Semiconductor Inc
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DECLARATION

EU RoHS	Yes
Pb Free	Yes
HalogenFree	Yes
Plating Indicator	e1
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MCIMX508CZK8B
Mfg Item Name	POPBGA 416 13*13*0.9 P.5
Version	ALL
Weight	0.684600
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	3
Peak Processing Temperature	260 C
Max Time at Peak Temperature	40 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	1 - Item(s) do not contain RoHS restricted substances per the definition above
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemption List Version	2012/51/EU
List of Freescale Accepted Exemptions	<p>6(a) : Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight</p> <p>6(b) : Lead as an alloying element in aluminium containing up to 0.4% lead by weight</p> <p>6(c) : Copper alloy containing up to 4% lead by weight</p> <p>7(a) : Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)</p> <p>7(b) : Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission, and network management for telecommunications</p> <p>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</p> <p>7(c)-II : Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher</p> <p>7(c)-III : Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC</p> <p>7(c)-IV : Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors</p> <p>15 : Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages</p>

MATERIAL COMPOSITION

Homogeneous Material	Weight	SubstanceClass	Substance	CAS	Exemption	SubstanceWeight	UoM	SubPart PPM	SubPart%	ARTICLEPPM	ARTICLE%
Bonding Wire	0.0037						g				
Bonding Wire		Metals	Gold, metal	7440-57-5		0.0037	g	1000000	100	5404	0.5404
Organic Substrate, Halogen-free	0.0775						g				
Organic Substrate, Halogen-free		Metals	Barium sulfate	7727-43-7		0.00415896	g	53664	5.3664	6075	0.6075
Organic Substrate, Halogen-free		Metals	Copper, metal	7440-50-8		0.03199162	g	412795	41.2795	46730	4.673
Organic Substrate, Halogen-free		Metals	Gold, metal	7440-57-5		0.00055886	g	7224	0.7224	817	0.0817
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Other inorganic compounds.	-		0.0047988	g	61920	6.192	7009	0.7009
Organic Substrate, Halogen-free		Nickel (external applications only)	Nickel	7440-02-0		0.00799792	g	103199	10.3199	11682	1.1682
Organic Substrate, Halogen-free		Glass	Fibrous-glass-wool	65997-17-3		0.01198692	g	154799	15.4799	17523	1.7523
Organic Substrate, Halogen-free		Plastics/polymers	Other acrylic/epoxy resin mixture	-		0.01359652	g	175439	17.5439	19860	1.986
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Talc (containing no asbestos fibers)	14807-96-9		0.0003999	g	5160	0.516	584	0.0584
Organic Substrate, Halogen-free		Plastics/polymers	Proprietary Material-Other Non-halogenated Epoxy resins	-		0.0019995	g	25800	2.58	2920	0.292
Epoxy Die Attach	0.0015						g				
Epoxy Die Attach		Solvents, additives, and other materials	Silicone modified epoxy resin	218163-11-2		0.000675	g	450000	45	985	0.0985
Epoxy Die Attach		Solvents, additives, and other materials	Other siloxanes and silicones	-		0.000075	g	50000	5	109	0.0109
Epoxy Die Attach		Glass	Dimethyl silicone polymer with silica	67762-90-7		0.000075	g	50000	5	109	0.0109
Epoxy Die Attach		Plastics/polymers	Proprietary Material-Other acrylic/epoxy resin mixture	-		0.00045	g	300000	30	657	0.0657
Epoxy Die Attach		Plastics/polymers	Plastic: TEE - Thermo Elastomeric	-		0.000075	g	50000	5	109	0.0109
Epoxy Die Attach		Solvents, additives, and other materials	4,4'-Diaminodiphenylsulfone	80-08-0		0.00015	g	100000	10	219	0.0219
Solder Balls - Lead Free	0.2121						g				
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.00106156	g	5005	0.5005	1550	0.155
Solder Balls - Lead Free		Nickel (external applications only)	Nickel	7440-02-0		0.00010626	g	501	0.0501	155	0.0155
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.00254796	g	12013	1.2013	3721	0.3721
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.20838422	g	982481	98.2481	304406	30.4406
Solder Balls - Lead Free	0.2121						g				
Solder Balls - Lead Free		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.00008505	g	401	0.0401	124	0.0124
Solder Balls - Lead Free		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00006363	g	300	0.03	92	0.0092
Solder Balls - Lead Free		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00006363	g	300	0.03	92	0.0092
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.00106177	g	5006	0.5006	1550	0.155
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.00637106	g	30038	3.0038	9306	0.9306
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.20445486	g	963955	96.3955	298648	29.8648
Die Encapsulant, Halogen-free	0.1635						g				
Die Encapsulant, Halogen-free		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0008175	g	5000	0.5	1194	0.1194
Die Encapsulant, Halogen-free		Solvents, additives, and other materials	Proprietary Material-Other organic silicon compounds	-		0.004905	g	30000	3	7164	0.7164
Die Encapsulant, Halogen-free		Plastics/polymers	Other phenolic resins	-		0.011445	g	70000	7	16717	1.6717
Die Encapsulant, Halogen-free		Glass	Silica, vitreous	80676-86-0		0.142245	g	870000	87	207778	20.7778
Die Encapsulant, Halogen-free		Plastics/polymers	Other acrylic resins	-		0.0040875	g	25000	2.5	5970	0.597
Silicon Semiconductor Die	0.0142						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000284	g	20000	2	414	0.0414
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.013916	g	980000	98	20327	2.0327

LINKS

MCD LINK	
NXP website	http://www.nxp.com
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	http://www.nxp.com/files/corporate/doc/support_info/NXP-ROHS-DECLARATION.pdf
China RoHS	http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/china-rohs:ENV_CHINA_ROHS_STRATEGY
REACH signed letter	http://www.nxp.com/files/corporate/doc/support_info/NXP-REACH-STATEMENT.pdf
ELV signed letter	http://www.nxp.com/files/corporate/doc/support_info/NXP-ELV-STATEMENT.pdf
Conflict Minerals statement	http://www.nxp.com/files/corporate/doc/support_info/NXP-STATEMENT-CONFLICT-MINERALS.pdf
NXP ENVIRONMENTAL INFORMATION	
Environmental Compliance website	http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization:ABUENVPRFPRDX
FAQ	http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/eco-product-faqs:ENVIRON_FAQ
Technical Service Request	http://www.nxp.com/support/sales-and-support:SUPPORTHOME
LINKS TO BLANK IPC1752 FORMS	
Blank IPC1752 v1.1 Form	http://www.NXP.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

IPC1752 XML LINKS

http://www.freescale.com/mcdfs/MCIMX508CZK8B_IPC1752_v11.xml

http://www.freescale.com/mcdfs/MCIMX508CZK8B_IPC1752A.xml