

**PART INFORMATION**

Mfg Item Number	MPC8572EPXAU LD
Mfg Item Name	FCPBGA 1023 33SQ2.75P1.0

**SUPPLIER**

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-01-08
Response Document ID	8443K00211D007A1.30
Contact Name	Freescale Semiconductor Inc
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**DECLARATION**

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

**MANUFACTURING**

Mfg Item Number	MPC8572EPXAU LD
Mfg Item Name	FCPBGA 1023 33SQ2.75P1.0
Version	ALL
Weight	13.095900
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	3
Peak Processing Temperature	245 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	<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%
Capactor_0306	0.0782						g				
Capactor_0306		Metals	Copper, metal	7440-50-8		0.0107916	g	138000	13.8	824	0.0824
Capactor_0306		Nickel (external applications only)	Nickel	7440-02-0		0.015249	g	195000	19.5	1164	0.1164
Capactor_0306		Metals	Tin, metal	7440-31-5		0.0010166	g	13000	1.3	77	0.0077
Capactor_0306		Metals	Barium titanate	12047-27-7		0.0511428	g	654000	65.4	3905	0.3905
Solder Balls - Low Lead	0.9636						g				
Solder Balls - Low Lead		Lead/Lead Compounds	Lead	7439-92-1		0.346896	g	360000	36	26488	2.6488
Solder Balls - Low Lead		Metals	Silver, metal	7440-22-4		0.019272	g	20000	2	1471	0.1471
Solder Balls - Low Lead		Metals	Tin, metal	7440-31-5		0.597432	g	620000	62	45619	4.5619
Capactor Solder Paste	0.0534						g				
Capactor Solder Paste		Metals	Copper, metal	7440-50-8		0.000267	g	5000	0.5	20	0.0020
Capactor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1		0.00000443	g	83	0.0083	0	0
Capactor Solder Paste		Metals	Silver, metal	7440-22-4		0.001602	g	30000	3	122	0.0122
Capactor Solder Paste		Metals	Tin, metal	7440-31-5		0.05152657	g	964917	96.4917	3934	0.3934
High Pb Bumped Semiconductor D	0.3473				15		g				
High Pb Bumped Semiconductor D		Lead/Lead Compounds	Lead	7439-92-1		0.03270767	g	94177	9.4177	2497	0.2497
High Pb Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.00028552	g	825	0.0825	21	0.0021
High Pb Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.00172122	g	4956	0.4956	131	0.0131
High Pb Bumped Semiconductor D		Metals	Titanium, metal	7440-32-6		0.00001459	g	42	0.0042	1	0.0001
High Pb Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.0031257	g	9000	0.9	238	0.0238
High Pb Bumped Semiconductor D		Glass	Silicon, doped	-		0.3094443	g	891000	89.1	23629	2.3629
Substrate Assembly, Halogen-Ir	4.0514				15		g				
Substrate Assembly, Halogen-Ir		Metals	Barium sulfate	7727-43-7		0.04681798	g	11556	1.1556	3575	0.3575
Substrate Assembly, Halogen-Ir		Metals	Copper, metal	7440-50-8		1.34173861	g	331179	33.1179	102454	10.2454
Substrate Assembly, Halogen-Ir		Plastics/polymers	Epikote 862	28064-14-4		0.37430074	g	92388	9.2388	28581	2.8581
Substrate Assembly, Halogen-Ir		Plastics/polymers	Formaldehyde, polymer with 2-methylphenol, glycidyl ether	64425-89-4		0.07253221	g	17903	1.7903	5538	0.5538
Substrate Assembly, Halogen-Ir		Lead/Lead Compounds	Lead	7439-92-1		0.01172475	g	2894	0.2894	895	0.0895
Substrate Assembly, Halogen-Ir		Plastics/polymers	Phenol, polymer with formaldehyde	9003-35-4		0.00430313	g	50450	5.045	15607	1.5607
Substrate Assembly, Halogen-Ir		Glass	Fibrous-glass-wool	65997-17-3		1.25191906	g	390009	39.0009	95596	9.5596
Substrate Assembly, Halogen-Ir		Glass	Silicon dioxide	7631-86-9		0.10730538	g	26486	2.6486	8193	0.8193
Substrate Assembly, Halogen-Ir		Metals	Tin, metal	7440-31-5		0.0198653	g	4928	0.4928	1524	0.1524
Substrate Assembly, Halogen-Ir		Solvents, additives, and other materials	Other Aromatic carbonyl compounds	-		0.00751535	g	1855	0.1855	573	0.0573
Substrate Assembly, Halogen-Ir		Metals	Aluminum Hydroxide	21645-51-2		0.61318749	g	151352	15.1352	46822	4.6822
Gel Die Encapsulant	0.0174						g				
Gel Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.001218	g	700000	70	930	0.093
Gel Die Encapsulant		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00174	g	100000	10	132	0.0132
Gel Die Encapsulant		Metals	Zinc oxide	1314-13-2		0.00261	g	150000	15	199	0.0199
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other miscellaneous substances.	-		0.000522	g	30000	3	39	0.0039
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl Cyclohexanes	70900-21-9		0.000174	g	10000	1	13	0.0013
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl methyl hydrogen siloxane	68037-59-2		0.000174	g	10000	1	13	0.0013
Underfill	0.0726						g				
Underfill		Solvents, additives, and other materials	4,4'-Diamino-3,3'-diethyl-diphenylmethane	19900-65-3		0.007986	g	110000	11	609	0.0609
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1		0.0000726	g	1000	0.1	5	0.0005
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3		0.0005808	g	8000	0.8	44	0.0044
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.010164	g	140000	14	776	0.0776
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.00726	g	100000	10	554	0.0554
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0000726	g	1000	0.1	5	0.0005
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.002904	g	40000	4	221	0.0221
Underfill		Glass	Silica, vitreous	60676-86-0		0.04356	g	600000	60	3326	0.3326
Bonding Agent	0.072						g				
Bonding Agent		Solvents, additives, and other materials	Other organic compounds.	-		0.000108	g	1500	0.15	8	0.0008
Bonding Agent		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.000216	g	3000	0.3	16	0.0016
Bonding Agent		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.03888	g	540000	54	2968	0.2968
Bonding Agent		Solvents, additives, and other materials	Other siloxanes and silicones	-		0.00216	g	30000	3	164	0.0164
Bonding Agent		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.0216	g	300000	30	1649	0.1649
Bonding Agent		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.0000144	g	200	0.02	1	0.0001
Bonding Agent		Solvents, additives, and other materials	Dimethyl methyl hydrogen siloxane	68037-59-2		0.00288	g	40000	4	219	0.0219
Bonding Agent		Solvents, additives, and other materials	Silicic acid sodium salt hydrolysis products with chlorotrimethylsilane and dichloroethylmethylal	68584-83-8		0.00324	g	45000	4.5	247	0.0247
Bonding Agent		Glass	Silylated silica	68909-20-6		0.00288	g	40000	4	219	0.0219
Bonding Agent		Metals	Other platinum compounds	-		0.0000216	g	300	0.03	1	0.0001
Cap/Cover	7.44						g				
Cap/Cover		Metals	Copper, metal	7440-50-8		7.3656	g	990000	99	562462	56.2462
Cap/Cover		Nickel (external applications only)	Nickel	7440-02-0		0.0744	g	10000	1	5681	0.5681

## LINKS

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

IPC1752 XML LINKS

[http://www.freescale.com/mcds/MPC8572EPXAULD\\_IPC1752\\_v11.xml](http://www.freescale.com/mcds/MPC8572EPXAULD_IPC1752_v11.xml)

[http://www.freescale.com/mcds/MPC8572EPXAULD\\_IPC1752A.xml](http://www.freescale.com/mcds/MPC8572EPXAULD_IPC1752A.xml)