Freescale Semiconductor Inc

PART INFORMATION	
Mfg Item Number	MC8610TPX1066JB
Mfg Item Name	FCPBGA 783 29SQ*2.9P1.0

SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-09-07
Response Document ID	8449K11256D054A1.22
Contact Name	Freescale Semiconductor Inc
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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	MC8610TPX1066JB
Mfg Item Name	FCPBGA 783 29SQ*2.9P1.0
Version	ALL
Weight	3.803300
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	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%
Capacitor, 0306	0.0782						g					
Capacitor, 0306		Metals	Copper, metal	7440-50-8		0.0107916	g	138000	13.8		2837	0.2837
Capacitor, 0306		Nickel (external applications only)	Nickel	7440-02-0		0.015249	g	195000	19.5		4009	0.4009
Capacitor, 0306		Metals	Tin, metal	7440-31-5		0.0010166	g	13000	1.3		267	0.0267
Capacitor, 0306		Metals	Barium titanate	12047-27-7		0.0511428	g	654000	65.4		13446	1.3446
Underfill	0.0618						g					
Underfill		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00074166	g	12001	1.2001		195	0.0195
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.01236087	g	200014	20.0014		3250	0.325
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00061806	g	10001	1.0001		162	0.0162
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.00309025	g	50004	5.0004		812	0.0812
Underfill		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.01872416	g	302980	30.298		4923	0.4923
Underfill		Glass	Silica, vitreous	60676-86-0		0.026265	g	425000	42.5		6905	0.6905
Capacitor Solder Paste	0.0065						g					
Capacitor Solder Paste		Solvents, additives, and other materials	Other aliphatic amines	-		0.00001365	g	2100	0.21		3	0.0003
Capacitor Solder Paste		Metals	Aluminum, metal	7429-90-5		0.00000007	g	10	0.001		0	0
Capacitor Solder Paste		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.0000065	g	1000	0.1		1	0.0001
Capacitor Solder Paste		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00000064	g	99	0.0099		0	0
Capacitor Solder Paste		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00000195	g	300	0.03		0	0
Capacitor Solder Paste		Cadmium/Cadmium Compounds	Cadmium	7440-43-9		0.00000013	g	20	0.002		0	0
Capacitor Solder Paste		Metals	Copper, metal	7440-50-8		0.00003179	g	4890	0.489		8	0.0008
Capacitor Solder Paste		Metals	Gold, metal	7440-57-5		0.00000033	g	50	0.005		0	0
Capacitor Solder Paste		Metals	Iron, metal	7439-89-6		0.0000013	g	200	0.02		0	0
Capacitor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1		0.00000325	g	500	0.05		0	0
Capacitor Solder Paste		Nickel (external applications only)	Nickel	7440-02-0		0.00000065	g	100	0.01		0	0
Capacitor Solder Paste		Metals	Silver, metal	7440-22-4		0.00017453	g	26850	2.685		45	0.0045
Capacitor Solder Paste		Metals	Tin, metal	7440-31-5		0.00626384	g	963670	96.367		1646	0.1646
Capacitor Solder Paste		Metals	Zinc, metal	7440-66-6		0.00000137	g	211	0.0211		0	0
Solder Balls - Low Lead	0.7462						g					
Solder Balls - Low Lead		Metals	Copper, metal	7440-50-8		0.00022386	g	300	0.03		58	0.0058
Solder Balls - Low Lead		Lead/Lead Compounds	Lead	7439-92-1		0.2757209	g	369500	36.95		72495	7.2495
Solder Balls - Low Lead		Metals	Silver, metal	7440-22-4		0.00014924	g	200	0.02		39	0.0039
Solder Balls - Low Lead		Metals	Tin, metal	7440-31-5		0.470106	g	630000	63		123604	12.3604
High Pb Bumped Semiconductor D	0.3463				15		g					
High Pb Bumped Semiconductor D		Lead/Lead Compounds	Lead	7439-92-1		0.0326135	g	94177	9.4177		8575	0.8575
High Pb Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.0002857	g	825	0.0825		75	0.0075
High Pb Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.00171626	g	4956	0.4956		451	0.0451
High Pb Bumped Semiconductor D		Metals	Titanium, metal	7440-32-6		0.00001454	g	42	0.0042		3	0.0003
High Pb Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.0031167	g	9000	0.9		819	0.0819
High Pb Bumped Semiconductor D		Glass	Silicon, doped	-		0.3085533	g	891000	89.1		81127	8.1127
Organic Substrate	2.5643						g					
Organic Substrate		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00001795	g	7	0.0007		4	0.0004
Organic Substrate		Metals	Barium sulfate	7727-43-7		0.01043157	g	4068	0.4068		2742	0.2742
Organic Substrate		Metals	Copper, metal	7440-50-8		0.89139684	g	347618	34.7618		234397	23.4397
Organic Substrate		Plastics/polymers	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3		0.02574557	g	10040	1.004		6769	0.6769
Organic Substrate		Plastics/polymers	Other Epoxy resins	-		0.0393697	g	15353	1.5353		10351	1.0351
Organic Substrate		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.10537991	g	41095	4.1095		27707	2.7707
Organic Substrate		Lead/Lead Compounds	Lead	7439-92-1		0.0019899	g	776	0.0776		523	0.0523
Organic Substrate		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.03657461	g	14263	1.4263		9616	0.9616
Organic Substrate		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.07086699	g	27636	2.7636		18633	1.8633
Organic Substrate		Glass	Fibrous-glass-wool	65997-17-3		0.72448655	g	282528	28.2528		190488	19.0488
Organic Substrate		Glass	Silicon dioxide	7631-86-9		0.23706184	g	92447	9.2447		62330	6.233
Organic Substrate		Metals	Silver, metal	7440-22-4		0.00062569	g	244	0.0244		164	0.0164
Organic Substrate		Metals	Tin, metal	7440-31-5		0.0235095	g	9168	0.9168		6181	0.6181
Organic Substrate		Metals	Aluminum Hydroxide	21645-51-2		0.39517402	g	154106	15.4106		103902	10.3902
Organic Substrate		Metals	Copper phthalocyanine	147-14-8		0.00166936	g	651	0.0651		438	0.0438

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/mcds/MC8610TPX1066JB_IPC1752_v11.xml

http://www.freescale.com/mcds/MC8610TPX1066JB_IPC1752A.xml