

**PART INFORMATION**

Mfg Item Number	MPC8536CVJANGA
Mfg Item Name	FCPBGA 783 29SQ2.9P1.0

**SUPPLIER**

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-03-10
Response Document ID	8446K00208D005A1.7
Contact Name	Freescale Semiconductor Inc
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Authorized Representative	Daniel Binyon
Representative Title	EPP Customer Response
Representative Phone	512-895-3406
Representative Email	eppanlst@freescale.com
URL for Additional Information	www.freescale.com

**DECLARATION**

EU RoHS	Yes
Pb Free	Yes
HalogenFree	Yes
Plating Indicator	e2
EU RoHS Exemption(s)	

**MANUFACTURING**

Mfg Item Number	MPC8536CVJANGA
Mfg Item Name	FCPBGA 783 29SQ2.9P1.0
Version	ALL
Weight	3.769800
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

<b>RoHS</b>	
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%
Capacitor_0306	0.0782						g				
Capacitor_0306		Metals	Copper, metal	7440-50-8		0.0107916	g	138000	13.8	2862	0.2862
Capacitor_0306		Nickel (external applications only)	Nickel	7440-02-0		0.015249	g	195000	19.5	4045	0.4045
Capacitor_0306		Metals	Tin, metal	7440-31-5		0.0010166	g	13000	1.3	269	0.0269
Capacitor_0306		Metals	Barium titanate	12047-27-7		0.0511428	g	654000	65.4	13566	1.3566
Capacitor Solder Paste	0.0065						g				
Capacitor Solder Paste		Metals	Copper, metal	7440-50-8		0.0000325	g	5000	0.5	8	0.0008
Capacitor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1		0.0000054	g	83	0.0083	0	0
Capacitor Solder Paste		Metals	Silver, metal	7440-22-4		0.000195	g	30000	3	51	0.0051
Capacitor Solder Paste		Metals	Tin, metal	7440-31-5		0.00627196	g	964917	96.4917	1663	0.1663
Solder Balls - Pb Free, Sn/Ag	0.6385						g				
Solder Balls - Pb Free, Sn/Ag		Metals	Silver, metal	7440-22-4		0.0223475	g	35000	3.5	6928	0.6928
Solder Balls - Pb Free, Sn/Ag		Metals	Tin, metal	7440-31-5		0.6161525	g	965000	96.5	163444	16.3444
Underfill	0.0618						g				
Underfill		Solvents, additives, and other materials	4,4'-Diamino-3,3'-diethyl-diphenylmethane	19900-65-3		0.006798	g	110000	11	1803	0.1803
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1		0.0000618	g	1000	0.1	16	0.0016
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3		0.0004944	g	8000	0.8	131	0.0131
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.008652	g	140000	14	2295	0.2295
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.00618	g	100000	10	1639	0.1639
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0000618	g	1000	0.1	16	0.0016
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.002472	g	40000	4	655	0.0655
Underfill		Glass	Silica, vitreous	60676-86-0		0.03708	g	600000	60	9836	0.9836
Substrate Assembly, Halogen-Fr	2.649						g				
Substrate Assembly, Halogen-Fr		Arsenic/Arsenic Compounds	Arsenic	7440-39-2		0.0001854	g	7	0.0007	4	0.0004
Substrate Assembly, Halogen-Fr		Metals	Barium sulfate	7727-43-7		0.01088209	g	4108	0.4108	2886	0.2886
Substrate Assembly, Halogen-Fr		Metals	Copper, metal	7440-50-8		0.9116454	g	344147	34.4147	241846	24.1846
Substrate Assembly, Halogen-Fr		Plastics/polymers	2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)bisoxirane	1675-54-3		0.02039995	g	7701	0.7701	5411	0.5411
Substrate Assembly, Halogen-Fr		Plastics/polymers	Other Epoxy resins	-		0.04113102	g	15527	1.5527	10910	1.091
Substrate Assembly, Halogen-Fr		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.1103441	g	41655	4.1655	29270	2.927
Substrate Assembly, Halogen-Fr		Lead/Lead Compounds	Lead	7439-92-1		0.00001325	g	5	0.0005	3	0.0003
Substrate Assembly, Halogen-Fr		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.03829924	g	14458	1.4458	10159	1.0159
Substrate Assembly, Halogen-Fr		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.07420379	g	28012	2.8012	18693	1.8693
Substrate Assembly, Halogen-Fr		Glass	Fibrous-glass-wool	65997-17-3		0.79996535	g	301899	30.1899	212211	21.2211
Substrate Assembly, Halogen-Fr		Glass	Silicon dioxide	7631-86-9		0.19830679	g	74861	7.4861	52804	5.2804
Substrate Assembly, Halogen-Fr		Metals	Silver, metal	7440-22-4		0.00085033	g	321	0.0321	225	0.0225
Substrate Assembly, Halogen-Fr		Metals	Tin, metal	7440-31-5		0.02734777	g	10334	1.0334	1261	0.1261
Substrate Assembly, Halogen-Fr		Metals	Aluminum Hydroxide	21645-61-2		0.41379499	g	156208	15.6208	109765	10.9765
Substrate Assembly, Halogen-Fr		Metals	Copper phthalocyanine	147-14-8		0.00174039	g	657	0.0657	461	0.0461
Pb-free Bumped Semiconductor D	0.3358						g				
Pb-free Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.001679	g	5000	0.5	445	0.0445
Pb-free Bumped Semiconductor D		Metals	Silver, metal	7440-22-4		0.00105777	g	3150	0.315	280	0.028
Pb-free Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.02916423	g	86850	8.685	7736	0.7736
Pb-free Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.0030222	g	9000	0.9	801	0.0801
Pb-free Bumped Semiconductor D		Glass	Silicon, doped	-		0.3008768	g	896000	89.6	79812	7.9812

**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/mcdfs/MPC8536CVJANGA\\_IPC1752\\_v11.xml](http://www.freescale.com/mcdfs/MPC8536CVJANGA_IPC1752_v11.xml)

[http://www.freescale.com/mcdfs/MPC8536CVJANGA\\_IPC1752A.xml](http://www.freescale.com/mcdfs/MPC8536CVJANGA_IPC1752A.xml)