PART INFORMATION	
Mfg Item Number	MPC8545EVTANGD
Mfg Item Name	FCPBGA 783 29*29*3.13 P1

SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-01-08
Response Document ID	009WK00206D002A1.11
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	No
HalogenFree	Yes
Plating Indicator	e2
EU RoHS Exemption(s)	15

MANUFACTURING	
Mfg Item Number	MPC8545EVTANGD
Mfg Item Name	FCPBGA 783 29*29*3.13 P1
Version	ALL
Weight	7.994400
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	4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemption List Version	2012/51/EU
Exemptions in this part	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	0.0704						g				
Capacitor, 0306		Metals	Copper, metal	7440-50-8		0.0097152	g	138000	13.8	1215	0.1215
Capacitor, 0306		Nickel (external applications only)	Nickel	7440-02-0		0.013728	g	195000	19.5	1717	0.1717
Capacitor, 0306		Metals	Tin, metal	7440-31-5		0.0009152	g	13000	1.3	114	0.0114
Capacitor, 0306		Metals	Barium titanate	12047-27-7		0.0460416	g	654000	65.4	5759	0.5759
Capacitor Solder Paste	0.001						g				
Capacitor Solder Paste		Metals	Copper, metal	7440-50-8		0.000005	g	5000	0.5	0	0
Capacitor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1		0.00000008	g	83	0.0083	0	0
Capacitor Solder Paste		Metals	Silver, metal	7440-22-4		0.00003	g	30000	3	3	0.0003
Capacitor Solder Paste		Metals	Tin, metal	7440-31-5		0.00096492	g	964917	96.4917	120	0.012
Solder Balls - Pb Free, Sn/Ag	0.6216						g				
Solder Balls - Pb Free, Sn/Ag		Metals	Silver, metal	7440-22-4		0.021756	g	35000	3.5	2721	0.2721
Solder Balls - Pb Free, Sn/Ag		Metals	Tin, metal	7440-31-5		0.599844	g	965000	96.5	75033	7.5033
Substrate	2.0186						g				
Substrate		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00001413	g	7	0.0007	1	0.0001
Substrate		Metals	Barium sulfate	7727-43-7		0.00818139	g	4053	0.4053	1023	0.1023
Substrate		Metals	Copper, metal	7440-50-8		0.70930374	g	351384	35.1384	88725	8.8725
Substrate		Plastics/polymers	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3		0.01507087	g	7466	0.7466	1885	0.1885
Substrate		Plastics/polymers	Other Epoxy resins	-		0.03082806	g	15272	1.5272	3856	0.3856
Substrate		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.08353169	g	41381	4.1381	10448	1.0448
Substrate		Lead/Lead Compounds	Lead	7439-92-1		0.00122731	g	608	0.0608	153	0.0153
Substrate		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.0285753	g	14156	1.4156	3574	0.3574
Substrate		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.05536616	g	27428	2.7428	6925	0.6925
Substrate		Glass	Fibrous-glass-wool	65997-17-3		0.60559413	g	300007	30.0007	75752	7.5752
Substrate		Glass	Silicon dioxide	7631-86-9		0.14840343	g	73518	7.3518	18563	1.8563
Substrate		Metals	Silver, metal	7440-22-4		0.00047841	g	237	0.0237	59	0.0059
Substrate		Metals	Tin, metal	7440-31-5		0.01747906	g	8659	0.8659	2186	0.2186
Substrate		Metals	Aluminum Hydroxide	21645-51-2		0.31323827	g	155176	15.5176	39182	3.9182
Substrate		Metals	Copper phthalocyanine	147-14-8		0.00130805	g	648	0.0648	163	0.0163
High Pb Bumped Semiconductor D	0.1348				15		g				
High Pb Bumped Semiconductor D		Lead/Lead Compounds	Lead	7439-92-1		0.01269506	g	94177	9.4177	1587	0.1587
High Pb Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.00011121	g	825	0.0825	13	0.0013
High Pb Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.00066807	g	4956	0.4956	83	0.0083
High Pb Bumped Semiconductor D		Metals	Titanium, metal	7440-32-6		0.00000566	g	42	0.0042	0	0
High Pb Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.0012132	g	9000	0.9	151	0.0151
High Pb Bumped Semiconductor D		Glass	Silicon, doped	-		0.1201068	g	891000	89.1	15023	1.5023
Cap/Cover	5.042						g				
Cap/Cover		Metals	Copper, metal	7440-50-8		4.99158	g	990000	99	624413	62.4413
Cap/Cover		Nickel (external applications only)	Nickel	7440-02-0		0.05042	g	10000	1	6306	0.6306
Gel Die Encapsulant	0.023						g				
Gel Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.0161	g	700000	70	2013	0.2013
Gel Die Encapsulant		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.0023	g	100000	10	287	0.0287
Gel Die Encapsulant		Metals	Zinc oxide	1314-13-2		0.00345	g	150000	15	431	0.0431
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other miscellaneous substances.	-		0.00069	g	30000	3	86	0.0086
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl Cyclosiloxanes	70900-21-9		0.00023	g	10000	1	28	0.0028
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl,methyl hydrogen siloxane	68037-59-2		0.00023	g	10000	1	28	0.0028
Underfill	0.023						g				
Underfill		Solvents, additives, and other materials	4,4'-Diamino-3,3'-diethyl-diphenylmethane	19900-65-3		0.00253	g	110000	11	316	0.0316
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1		0.000023	g	1000	0.1	2	0.0002
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3		0.000184	g	8000	0.8	23	0.0023
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.00322	g	140000	14	402	0.0402
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.0023	g	100000	10	287	0.0287
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.000023	g	1000	0.1	2	0.0002
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.00092	g	40000	4	115	0.0115
Underfill		Glass	Silica, vitreous	60676-86-0		0.0138	g	600000	60	1726	0.1726
Bonding Agent	0.06						g				
Bonding Agent		Solvents, additives, and other materials	Other organic compounds.	-		0.00009	g	1500	0.15	11	0.0011
Bonding Agent		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.00018	g	3000	0.3	22	0.0022
Bonding Agent		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.0324	g	540000	54	4052	0.4052
Bonding Agent		Solvents, additives, and other materials	Other siloxanes and silicones	-		0.0018	g	30000	3	225	0.0225
Bonding Agent		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.018	g	300000	30	2251	0.2251
Bonding Agent		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000012	g	200	0.02	1	0.0001
Bonding Agent		Solvents, additives, and other materials	Dimethyl,methyl hydrogen siloxane	68037-59-2		0.0024	g	40000	4	300	0.03
Bonding Agent		Solvents, additives, and other materials	Silicic acid sodium salt hydrolysis products with chlorotrimethylsilane and dichloroethenylmethylsil	68584-83-8		0.0027	g	45000	4.5	337	0.0337
Bonding Agent		Glass	Silylated silica	68909-20-6		0.0024	g	40000	4	300	0.03
Bonding Agent		Metals	Other platinum compounds	-		0.000018	g	300	0.03	2	0.0002

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/MPC8545EVTANGD_IPC1752_v11.xml

http://www.freescale.com/mcds/MPC8545EVTANGD_IPC1752A.xml