PART INFORMATION

Mfg Item Number	MC8641DTVJ1333JE
Mfg Item Name	FCCBGA 1023 33SQ*1.2P1.0

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2015-12-10
Response Document ID	8411K11156D017M1.1
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	Yes
Pb Free	Yes
HalogenFree	Yes
Plating Indicator	e2
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MC8641DTVJ1333JE
Mfg Item Name	FCCBGA 1023 33SQ*1.2P1.0
Version	ALL
Weight	5.439700
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	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	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	0.1462						g					
Capacitor, 0306		Metals	Copper, metal	7440-50-8		0.0201756	g	138000	13.8		3708	0.3708
Capacitor, 0306		Nickel (external applications only)	Nickel	7440-02-0		0.028509	g	195000	19.5		5240	0.524
Capacitor, 0306		Metals	Tin, metal	7440-31-5		0.0019006	g	13000	1.3		349	0.0349
Capacitor, 0306		Metals	Barium titanate	12047-27-7		0.0956148	g	654000	65.4		17577	1.7577
Capacitor Solder Paste	0.0534						g					
Capacitor Solder Paste		Metals	Copper, metal	7440-50-8		0.000267	g	5000	0.5		49	0.0049
Capacitor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1		0.00000443	g	83	0.0083		0	0
Capacitor Solder Paste		Metals	Silver, metal	7440-22-4		0.001602	g	30000	3		294	0.0294
Capacitor Solder Paste		Metals	Tin, metal	7440-31-5		0.05152657	g	964917	96.4917		9472	0.9472
Ceramic Substrate	3.9198						g					
Ceramic Substrate		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.10669696	g	27220	2.722		19614	1.9614
Ceramic Substrate		Metals	Barium oxide	1304-28-5		0.63687342	g	162476	16.2476		117078	11.7078
Ceramic Substrate		Metals	Boron oxide	1303-86-2		0.1402818	g	35788	3.5788		25788	2.5788
Ceramic Substrate		Solvents, additives, and other materials	Calcium monoxide	1305-78-8		0.0775258	g	19778	1.9778		14251	1.4251
Ceramic Substrate		Metals	Chromium oxide	1308-38-9		0.01358211	g	3465	0.3465		2496	0.2496
Ceramic Substrate		Metals	Copper, metal	7440-50-8		0.49623492	g	126597	12.6597		91224	9.1224
Ceramic Substrate		Metals	Cuprous oxide	1317-39-1		0.00313584	g	800	0.08		576	0.0576
Ceramic Substrate		Metals	Gold, metal	7440-57-5		0.002297	g	586	0.0586		422	0.0422
Ceramic Substrate		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00156792	g	400	0.04		288	0.0288
Ceramic Substrate		Lead/Lead Compounds	Lead	7439-92-1		0.00001176	g	3	0.0003		2	0.0002
Ceramic Substrate		Metals	Magnesium-oxide	1309-48-4		0.00313584	g	800	0.08		576	0.0576
Ceramic Substrate		Nickel (external applications only)	Nickel	7440-02-0		0.01587911	g	4051	0.4051		2919	0.2919
Ceramic Substrate		Metals	Palladium, metal	7440-05-3		0.00019599	g	50	0.005		36	0.0036
Ceramic Substrate		Glass	Silicon dioxide	7631-86-9		2.34703513	g	598764	59.8764		431487	43.1487
Ceramic Substrate		Metals	Strontium Oxide	1314-11-0		0.00837269	g	2136	0.2136		1539	0.1539
Ceramic Substrate		Metals	Titanium (IV) Oxide	13463-67-7		0.00006272	g	16	0.0016		11	0.0011
Ceramic Substrate		Metals	Zinc oxide	1314-13-2		0.00005096	g	13	0.0013		9	0.0009
Ceramic Substrate		Metals	Zirconium oxide	1314-23-4		0.06686003	g	17057	1.7057		12291	1.2291
Solder Balls - Pb Free, Sn/Ag	0.8377						g					
Solder Balls - Pb Free, Sn/Ag		Metals	Silver, metal	7440-22-4		0.0293195	g	35000	3.5		5389	0.5389
Solder Balls - Pb Free, Sn/Ag		Metals	Tin, metal	7440-31-5		0.8083805	g	965000	96.5		148607	14.8607
Solder Paste	0.0855						g					
Solder Paste		Solvents, additives, and other materials	Proprietary Material-Other aromatic amines	-		0.00211219	g	24704	2.4704		388	0.0388
Solder Paste		Metals	Copper, metal	7440-50-8		0.00052805	g	6176	0.6176		97	0.0097
Solder Paste		Solvents, additives, and other materials	Other organic compounds.	-		0.00364239	g	42601	4.2601		669	0.0669
Solder Paste		Metals	Silver, metal	7440-22-4		0.00286656	g	33527	3.3527		526	0.0526
Solder Paste		Metals	Tin, metal	7440-31-5		0.07204024	g	842576	84.2576		13243	1.3243
Solder Paste		Solvents, additives, and other materials	Poly(ethylene glycol-ran-propylene glycol) monobutyl ether	9038-95-3		0.00431057	g	50416	5.0416		792	0.0792
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		1468	0.1468
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1		0.0000726	g	1000	0.1		13	0.0013
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3		0.0005808	g	8000	0.8		106	0.0106
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.010164	g	140000	14		1868	0.1868
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.00726	g	100000	10		1334	0.1334
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0000726	g	1000	0.1		13	0.0013
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.002904	g	40000	4		533	0.0533
Underfill		Glass	Silica, vitreous	60676-86-0		0.04356	g	600000	60		8007	0.8007
Pb-free Bumped Semiconductor D	0.3245						g					
Pb-free Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.0016225	g	5000	0.5		298	0.0298
Pb-free Bumped Semiconductor D		Metals	Silver, metal	7440-22-4		0.00102218	g	3150	0.315		187	0.0187
Pb-free Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.02818283	g	86850	8.685		5180	0.518
Pb-free Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.0029205	g	9000	0.9		536	0.0536
Pb-free Bumped Semiconductor D		Glass	Silicon, doped	-		0.29075199	g	896000	89.6		53450	5.345

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/MC8641DTVJ1333JE_IPC1752_v11.xml

http://www.freescale.com/mcds/MC8641DTVJ1333JE_IPC1752A.xml