

PART INFORMATION	
Mfg Item Number	MCIMX6Q6AVT10AD
Mfg Item Name	FC-PBGA 624 21*21*2 P0.8
SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2013-09-11
Response Document ID	00A2K10737D169M1.0
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	Yes
HalogenFree	Yes
Plating Indicator	e1
EU RoHS Exemption(s)	
MANUFACTURING	
Mfg Item Number	MCIMX6Q6AVT10AD
Mfg Item Name	FC-PBGA 624 21*21*2 P0.8
Version	ALL
Weight	3.323600
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	1 - Item(s) do not contain RoHS restricted substances per the definition above
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemptions in this part	
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

SubPart	Weight	SubstanceClass	Substance	CAS	Exemption	SubstanceWeight	UoM	SubPart PPM	SubPart%		REACHPPM	REACH%
Organic Substrate, Halogen-free	0.9169						g					
Organic Substrate, Halogen-free		Metals	Barium sulfate	7727-43-7		0.009758	g	10642	1.0642		2935	0.2935
Organic Substrate, Halogen-free		Metals	Copper, metal	7440-50-8		0.562946	g	613967	61.3967		169381	16.9381
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Other imidazole compounds	-		0.000557	g	608	0.0608		167	0.0167
Organic Substrate, Halogen-free		Metals	Talc	14807-96-6		0.001672	g	1824	0.1824		503	0.0503
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.001765	g	1925	0.1925		531	0.0531
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Proprietary Material-Other organic silicon compounds	-		0.065233	g	71145	7.1145		19627	1.9627
Organic Substrate, Halogen-free		Plastics/polymers	4,4'-isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.009107	g	9932	0.9932		2740	0.274
Organic Substrate, Halogen-free		Glass	Fiberoptic-glass-wool	65997-17-3		0.182318	g	198842	19.8842		54856	5.4856
Organic Substrate, Halogen-free		Glass	Silicon dioxide	7631-86-9		0.0929231	g	64599	6.4599		17821	1.7821
Organic Substrate, Halogen-free		Glass	Other silica compounds	0.001765			g	1925	0.1925		531	0.0531
Organic Substrate, Halogen-free		Metals	Silver, metal	7440-22-4		0.000065	g	60	0.006		16	0.0016
Organic Substrate, Halogen-free		Metals	Tin, metal	7440-31-5		0.001637	g	2003	0.2003		552	0.0552
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Toluene	108-88-3		0.000176	g	192	0.0192		52	0.0052
Organic Substrate, Halogen-free		Plastics/polymers	Other Non-halogenated Epoxy resins	-		0.016726	g	18242	1.8242		5032	0.5032
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Other organosilane compounds	-		0.000093	g	101	0.0101		27	0.0027
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Cyclohexanone	108-94-1		0.003661	g	3993	0.3993		1101	0.1101
Underfill	0.012						g					
Underfill		Metals	Other bismuth compounds	-		0.000299	g	24876	2.4876		89	0.0089
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-49-6		0.001791	g	149254	14.9254		538	0.0538
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9009-36-5		0.001194	g	99502	9.9502		359	0.0359
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00006	g	4975	0.4975		18	0.0018
Underfill		Plastics/polymers	4,4'-isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.000299	g	24876	2.4876		89	0.0089
Underfill		Glass	Silica, vitreous	60676-86-0		0.007163	g	597015	59.7015		2155	0.2155
Underfill		Solvents, additives, and other materials	Diethyltoluenediamine	68479-98-1		0.001194	g	99502	9.9502		359	0.0359
Epoxy Die Attach	0.0097						g					
Epoxy Die Attach		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.00776	g	800000	80		2334	0.2334
Epoxy Die Attach		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00194	g	200000	20		583	0.0583
Solder Balls - Lead Free	0.3172						g					
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.001589	g	5009	0.5009		478	0.0478
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.009533	g	30054	3.0054		2868	0.2868
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.306078	g	964937	96.4937		92093	9.2093
Gel Die Encapsulant	0.0206						g					
Gel Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.01442	g	699968	69.9968		4338	0.4338
Gel Die Encapsulant		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.00205	g	99510	9.951		616	0.0616
Gel Die Encapsulant		Metals	Zinc oxide	1314-13-2		0.00412	g	200022	20.0022		1239	0.1239
Gel Die Encapsulant		Plastics/polymers	Other non-halogenated polymers	-		0.00001	g	500	0.05		3	0.0003
Heat Spreader	2.0062						g					
Heat Spreader		Metals	Copper, metal	7440-50-8		1.975038	g	984467	98.4467		594260	59.426
Heat Spreader		Metals	Nickel, metal	7440-02-0		0.031162	g	15533	1.5533		9375	0.9375
Pb-free Bumped Semiconductor D	0.041						g					
Pb-free Bumped Semiconductor D		Metals	Nickel, metal	7440-02-0		0.000205	g	5000	0.5		61	0.0061
Pb-free Bumped Semiconductor D		Metals	Silver, metal	7440-22-4		0.000129	g	3150	0.315		38	0.0038
Pb-free Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.003561	g	86850	8.685		1071	0.1071
Pb-free Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000369	g	9000	0.9		111	0.0111
Pb-free Bumped Semiconductor D		Glass	Silicon, doped	-		0.036736	g	896000	89.6		11053	1.1053

LINKS	
MCD LINK	
Freescal website	<a href="http://www.freescal.com">http://www.freescal.com</a>
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescal_Response.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescal_Response.pdf</a>
China RoHS	<a href="http://www.freescal.com/chinarohs">http://www.freescal.com/chinarohs</a>
REACH signed letter	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescal_Response.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescal_Response.pdf</a>
ELV signed letter	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescal_Reponse.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescal_Reponse.pdf</a>
Conflict Minerals statement	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescal_Response.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescal_Response.pdf</a>
FREESCALE ENVIRONMENTAL INFORMATION	
EPP website	<a href="http://www.freescal.com/epp">http://www.freescal.com/epp</a>
FAQ	<a href="http://www.freescal.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ">http://www.freescal.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ</a>
Technical Service Request	<a href="https://www.freescal.com/webapp/servicerequest.create_SR.framework?defaultCategory=Hardware Product Support&amp;defaultTopic=Environmentally Preferred Prod">https://www.freescal.com/webapp/servicerequest.create_SR.framework?defaultCategory=Hardware Product Support&amp;defaultTopic=Environmentally Preferred Prod</a>
LINKS TO BLANK IPC1752 FORMS	
Blank IPC1752 v0.9 Form	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf</a>
Blank IPC1752 v1.1 Form	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf</a>

IPC1752 XML LINKS

[http://www.freescale.com/mcds/MCIMX6Q6AVT10AD\\_IPC1752\\_v09.xml](http://www.freescale.com/mcds/MCIMX6Q6AVT10AD_IPC1752_v09.xml)

[http://www.freescale.com/mcds/MCIMX6Q6AVT10AD\\_IPC1752\\_v11.xml](http://www.freescale.com/mcds/MCIMX6Q6AVT10AD_IPC1752_v11.xml)

[http://www.freescale.com/mcds/MCIMX6Q6AVT10AD\\_IPC1752A.xml](http://www.freescale.com/mcds/MCIMX6Q6AVT10AD_IPC1752A.xml)