Freescale Semiconductor Inc

PART INFORMATION	
Mfg Item Number	PCIMX6Q5EYM12AC
Mfg Item Name	FCPBGA 624 21*21*1.45P.8

SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2013-03-14
Response Document ID	009UK10737D166A1.0
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	PCIMX6Q5EYM12AC
Mfg Item Name	FCPBGA 624 21*21*1.45P.8
Version	ALL
Weight	1.287100
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%
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		159	0.0159
Pb-free Bumped Semiconductor D		Metals	Silver, metal	7440-22-4		0.000129	g	3150	0.315		100	0.01
Pb-free Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.003561	g	86850	8.685		2766	0.2766
Pb-free Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000369	g	9000	0.9		286	0.0286
Pb-free Bumped Semiconductor D		Glass	Silicon, doped	-		0.036736	g	896000	89.6		28541	2.8541
Organic Substrate, Halogen-fre	0.9169						g					
Organic Substrate, Halogen-fre		Metals	Barium sulfate	7727-43-7		0.009758	g	10642	1.0642		7581	0.7581
Organic Substrate, Halogen-fre		Metals	Copper, metal	7440-50-8		0.562946	g	613967	61.3967		437385	43.7385
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Other imidazole compounds	-		0.000557	g	608	0.0608		432	0.0432
Organic Substrate, Halogen-fre		Metals	Talc	14807-96-6		0.001672	g	1824	0.1824		1299	0.1299
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.001765	g	1925	0.1925		1371	0.1371
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Proprietary Material-Other organic silicon compounds	-		0.065233	g	71145	7.1145		50682	5.0682
Organic Substrate, Halogen-fre		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.009107	g	9932	0.9932		7075	0.7075
Organic Substrate, Halogen-fre		Glass	Fibrous-glass-wool	65997-17-3		0.182318	g	198842	19.8842		141651	14.1651
Organic Substrate, Halogen-fre		Glass	Silicon dioxide	7631-86-9		0.059231	g	64599	6.4599		46018	4.6018
Organic Substrate, Halogen-fre		Glass	Other silica compounds	-		0.001765	g	1925	0.1925		1371	0.1371
Organic Substrate, Halogen-fre		Metals	Silver, metal	7440-22-4		0.000055	g	60	0.006		42	0.0042
Organic Substrate, Halogen-fre		Metals	Tin, metal	7440-31-5		0.001837	g	2003	0.2003		1427	0.1427
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Toluene	108-88-3		0.000176	g	192	0.0192		136	0.0136
Organic Substrate, Halogen-fre		Plastics/polymers	Other Non-halogenated Epoxy resins	-		0.016726	g	18242	1.8242		12995	1.2995
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Other organosilane compounds	-		0.000093	g	101	0.0101		72	0.0072
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Cyclohexanone	108-94-1		0.003661	g	3993	0.3993		2844	0.2844
Underfill	0.012						g					
Underfill		Metals	Other bismuth compounds	-		0.000299	g	24876	2.4876		232	0.0232
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.001791	g	149254	14.9254		1391	0.1391
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.001194	g	99502	9.9502		927	0.0927
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00006	g	4975	0.4975		46	0.0046
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.000299	g	24876	2.4876		232	0.0232
Underfill		Glass	Silica, vitreous	60676-86-0		0.007163	g	597015	59.7015		5565	0.5565
Underfill		Solvents, additives, and other materials	Diethyltoluenediamine	68479-98-1		0.001194	g	99502	9.9502		927	0.0927
Solder Balls - Lead Free	0.3172						g					
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.001589	g	5009	0.5009		1234	0.1234
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.009533	g	30054	3.0054		7406	0.7406
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.306078	g	964937	96.4937		237807	23.7807

LINKS	
MCD LINK	
Freescale website	http://www.freescale.com
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescale_Response.pdf
China RoHS	http://www.freescale.com/chinarohs
REACH signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescale_Response.pdf
ELV signed letter	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescale_Reponse.pdf
Conflict Minerals statement	http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescale_Response.pdf
FREESCALE ENVIRONMENTAL INFORMATION	
EPP website	http://www.freescale.com/epp
FAQ	http://www.freescale.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ
Technical Service Request	https://www.freescale.com/webapp/servicerequest.create_SR.framework?defaultCategory=Hardware Product Support&defaultTopic=Environmentally Preferred Prod
LINKS TO BLANK IPC1752 FORMS	
Blank IPC1752 v0.9 Form	http://www.freescale.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf
Blank IPC1752 v1.1 Form	http://www.freescale.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

IPC1752 XML LINKS

http://www.freescale.com/mcds/PCIMX6Q5EYM12AC_IPC1752_v09.xml

http://www.freescale.com/mcds/PCIMX6Q5EYM12AC_IPC1752_v11.xml

http://www.freescale.com/mcds/PCIMX6Q5EYM12AC_IPC1752A.xml