

PART INFORMATION

Mfg Item Number	MCIMX6D5EYM12AD
Mfg Item Name	FCPBGA 624 21*21*1.45P.8

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-09-05
Response Document ID	009UA1.3
Contact Name	Freescale Semiconductor Inc
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DECLARATION

EU RoHS	Yes
Pb Free	Yes
HalogenFree	Yes
Plating Indicator	e1
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MCIMX6D5EYM12AD
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
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. piezoelectric 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%
Solder Balls - Lead Free	0.3172						g				
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.00158885	g	5009	0.5009	1234	0.1234
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.00953313	g	30054	3.0054	7406	0.7406
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.30607802	g	964937	96.4937	237804	23.7804
Underfill	0.012						g				
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1		0.00006	g	5000	0.5	46	0.0046
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3		0.00006	g	5000	0.5	46	0.0046
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6		0.0018	g	150000	15	1388	0.1388
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.0012	g	100000	10	932	0.0932
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00006	g	5000	0.5	46	0.0046
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.00036	g	30000	3	279	0.0279
Underfill		Glass	Silica, vitreous	60676-86-0		0.0072	g	600000	60	5503	0.5503
Underfill		Solvents, additives, and other materials	Proprietary Material-Other miscellaneous substances	-		0.00006	g	5000	0.5	46	0.0046
Underfill		Solvents, additives, and other materials	Proprietary Material-Other aliphatic amine compounds	-		0.0012	g	100000	10	932	0.0932
Organic Substrate, Halogen-free	0.9169						g				
Organic Substrate, Halogen-free		Metals	Barium sulfate	7727-43-7		0.01698374	g	18523	1.8523	13196	1.3196
Organic Substrate, Halogen-free		Metals	Copper, metal	7440-50-8		0.36896331	g	402403	40.2403	286677	28.6677
Organic Substrate, Halogen-free		Plastics/polymers	Epikote 862	28064-14-4		0.08458678	g	92253	9.2253	65718	6.5718
Organic Substrate, Halogen-free		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.08032419	g	87615	8.7615	62414	6.2414
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Bentonite	1302-79-9		0.000541	g	59	0.0059	42	0.0042
Organic Substrate, Halogen-free		Metals	Talc	14807-96-6		0.0019475	g	2124	0.2124	1513	0.1513
Organic Substrate, Halogen-free		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane concentrate	25068-38-6		0.01212967	g	13229	1.3229	9424	0.9424
Organic Substrate, Halogen-free		Glass	Fibrous-glass-wool	65997-17-3		0.17890094	g	195115	19.5115	13895	13.895
Organic Substrate, Halogen-free		Glass	Silicon dioxide	7631-86-9		0.10760738	g	117360	11.736	83604	8.3604
Organic Substrate, Halogen-free		Metals	Silver, metal	7440-22-4		0.00026315	g	287	0.0287	204	0.0204
Organic Substrate, Halogen-free		Metals	Tin, metal	7440-31-5		0.00847124	g	9239	0.9239	6581	0.6581
Organic Substrate, Halogen-free		Solvents, additives, and other materials	Polydimethyl silicones and siloxanes	63148-62-9		0.00048596	g	530	0.053	377	0.0377
Organic Substrate, Halogen-free		Metals	Aluminum Hydroxide	21645-51-2		0.05606385	g	61145	6.1145	43558	4.3558
Organic Substrate, Halogen-free		Metals	Copper phthalocyanine	147-14-8		0.00010819	g	118	0.0118	84	0.0084
Pb-free Bumped Semiconductor D	0.041						g				
Pb-free Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0		0.000205	g	5000	0.5	159	0.0159
Pb-free Bumped Semiconductor D		Metals	Silver, metal	7440-22-4		0.00012915	g	3150	0.315	100	0.01
Pb-free Bumped Semiconductor D		Metals	Tin, metal	7440-31-5		0.00356085	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

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/mcdfs/MCIMX6D5EYM12AD_IPC1752_v11.xml

http://www.freescale.com/mcdfs/MCIMX6D5EYM12AD_IPC1752A.xml