Freescale Semiconductor Inc

PART INFORMATION	
Mfg Item Number	MCIMX6S6AVM10AD
Mfg Item Name	MAPBGA 624 21*21*1.6 P.8

SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-09-15
Response Document ID	00BNK50001S058M1.0
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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Contact Email	support@freescale.com
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	MCIMX6S6AVM10AD
Mfg Item Name	MAPBGA 624 21*21*1.6 P.8
Version	ALL
Weight	1.252500
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	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%
Non-Conductive Epoxy/Adhesive	0.0015						g					
Non-Conductive Epoxy/Adhesive		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.0001125	g	75000	7.5		89	0.0089
Non-Conductive Epoxy/Adhesive		Plastics/polymers	Crosslinked acrylate polymer	25767-43-5		0.0003	g	200000	20		239	0.0239
Non-Conductive Epoxy/Adhesive		Plastics/polymers	Other polymers	-		0.0001125	g	75000	7.5		89	0.0089
Non-Conductive Epoxy/Adhesive		Plastics/polymers	Proprietary Material-Other polymers	-		0.0003	g	200000	20		239	0.0239
Non-Conductive Epoxy/Adhesive		Glass	Silica, vitreous	60676-86-0		0.000675	g	450000	45		538	0.0538
Die Encapsulant	0.7009						g					
Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.01402501	g	20010	2.001		11197	1.1197
Die Encapsulant		Metals	Magnesium, metal	7439-95-4		0.0070125	g	10005	1.0005		5598	0.5598
Die Encapsulant		Plastics/polymers	Other phenolic resins	-		0.02103751	g	30015	3.0015		16796	1.6796
Die Encapsulant		Glass	Silicon dioxide	7631-86-9		0.12622508	g	180090	18.009		100778	10.0778
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.49052487	g	699850	69.985		391652	39.1652
Die Encapsulant		Plastics/polymers	Other acrylic/epoxy resin mixture	-		0.04207503	g	60030	6.003		33592	3.3592
Bonding Wire, PdCu	0.0083						g					
Bonding Wire, PdCu		Metals	Copper, metal	7440-50-8		0.00814225	g	980994	98.0994		6500	0.65
Bonding Wire, PdCu		Metals	Gold, metal	7440-57-5		0.0000083	g	1000	0.1		6	0.0006
Bonding Wire, PdCu		Metals	Palladium, metal	7440-05-3		0.00014945	g	18006	1.8006		119	0.0119
Organic Substrate, Halogen-fre	0.2148						g					
Organic Substrate, Halogen-fre		Metals	Barium sulfate	7727-43-7		0.00448438	g	20877	2.0877		3580	0.358
Organic Substrate, Halogen-fre		Metals	Copper, metal	7440-50-8		0.12331949	g	574113	57.4113		98458	9.8458
Organic Substrate, Halogen-fre		Metals	Gold, metal	7440-57-5		0.00672646	g	31315	3.1315		5370	0.537
Organic Substrate, Halogen-fre		Metals	Talc	14807-96-6		0.00179379	g	8351	0.8351		1432	0.1432
Organic Substrate, Halogen-fre		Nickel (external applications only)	Nickel	7440-02-0		0.04260128	g	198330	19.833		34012	3.4012
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Silicone modified epoxy resin	218163-11-2		0.02242168	g	104384	10.4384		17901	1.7901
Organic Substrate, Halogen-fre		Glass	Fibrous-glass-wool	65997-17-3		0.01121084	g	52192	5.2192		8950	0.895
Organic Substrate, Halogen-fre		Glass	Silica, vitreous	60676-86-0		0.00224208	g	10438	1.0438		1790	0.179
Solder Balls - Lead Free	0.3086						g					
Solder Balls - Lead Free		Metals	Copper, metal	7440-50-8		0.00154578	g	5009	0.5009		1234	0.1234
Solder Balls - Lead Free		Metals	Silver, metal	7440-22-4		0.00927466	g	30054	3.0054		7404	0.7404
Solder Balls - Lead Free		Metals	Tin, metal	7440-31-5		0.29777956	g	964937	96.4937		237748	23.7748
Silicon Semiconductor Die	0.0184						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000368	g	20000	2		293	0.0293
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.018032	g	980000	98		14396	1.4396

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/MCIMX6S6AVM10AD_IPC1752_v11.xml

http://www.freescale.com/mcds/MCIMX6S6AVM10AD_IPC1752A.xml