PART INFORMATION

Mfg Item Number	MPX2300DT1
Mfg Item Name	CHIP PAK

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2012-11-14
Response Document ID	0217A1.7
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
Contact Phone	1-800-521-6274
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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	No
Plating Indicator	e4
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MPX2300DT1
Mfg Item Name	CHIP PAK
Version	ALL
Weight	0.169800
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	
Peak Processing Temperature	
Max Time at Peak Temperature	
Number of Processing Cycles	3

RoHS	
RoHS Directive	2002/95/EC
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 2002/95/EC 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%
Non-Conductive Epoxy/Adhesive	0.0019						g					
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Silicone gum	67762-94-1		0.00002	g	10324	1.0324		117	0.0117
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	68083-18-1		0.000234	g	122911	12.2911		1378	0.1378
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.000748	g	393313	39.3313		4405	0.4405
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Proprietary Material-Other siloxanes and silicones	-		0.00042	g	221239	22.1239		2473	0.2473
Non-Conductive Epoxy/Adhesive		Glass	D4 and HMDZ treated Silicon Dioxide	68937-51-9		0.00028	g	147493	14.7493		1648	0.1648
Non-Conductive Epoxy/Adhesive		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.000177	g	93412	9.3412		1042	0.1042
Non-Conductive Epoxy/Adhesive		Metals	Titanium (IV) Oxide	13463-67-7		0.000021	g	11308	1.1308		123	0.0123
Encapsulant Gel	0.003						g					
Encapsulant Gel		Metals	Arsenic, metal	7440-38-2		0	g	3	0.0003		0	0
Encapsulant Gel		Metals	Beryllium, metal	7440-41-7		0	g	1	0.0001		0	0
Encapsulant Gel		Metals	Cadmium, metal	7440-43-9		0	g	1	0.0001		0	0
Encapsulant Gel		Metals	Chromium, metal	7440-47-3		0.000606	g	202142	20.2142		3568	0.3568
Encapsulant Gel		Metals	Copper, metal	7440-50-8		0.00002	g	6500	0.65		117	0.0117
Encapsulant Gel		Solvents, additives, and other materials	Calcium/Limestone	1317-65-3		0.00015	g	50000	5		883	0.0883
Encapsulant Gel		Metals	Lead, metallic lead and lead alloys	7439-92-1		0	g	3	0.0003		0	0
Encapsulant Gel		Metals	Manganese, metal	7439-96-5		0.000047	g	15600	1.56		276	0.0276
Encapsulant Gel		Metals	Mercury	7439-97-6		0	g	0	0		0	0
Encapsulant Gel		Metals	Molybdenum, metal	7439-98-7		0.000075	g	25000	2.5		441	0.0441
Encapsulant Gel		Glass	Silica, amorphous synthetic	112926-00-8		0.000002	g	750	0.075		11	0.0011
Encapsulant Gel		Solvents, additives, and other materials	Polydimethyl silicones and siloxanes	63148-62-9		0.0021	g	700000	70		12367	1.2367
Bonding Wire	0.0002						g					
Bonding Wire		Metals	Gold, metal	7440-57-5		0.0002	g	1000000	100		1177	0.1177
Gel Die Encapsulant	0.0045						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.0045	g	1000000	100		26501	2.6501
Silicon Semiconductor Die	0.0036						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000072	g	20000	2		424	0.0424
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.003528	g	980000	98		20777	2.0777
Copper Lead Frame	0.1566						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.094114	g	600985	60.0985		554273	55.4273
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0	g	0	0		0	0
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus	7723-14-0		0	g	0	0		0	0
Copper Lead Frame		Metals	Nickel, metal	7440-02-0		0.003857	g	24631	2.4631		22714	2.2714
Copper Lead Frame		Plastics/polymers	Polysulfone - Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 1,1'-sulfonylbis(4-chlorobenzene)	25154-01-2		0.051686	g	330049	33.0049		304396	30.4396
Copper Lead Frame		Metals	Tin, metal	7440-31-5		0.0054	g	34483	3.4483		31802	3.1802
Copper Lead Frame		Metals	Titanium (IV) Oxide	13463-67-7		0.001543	g	9852	0.9852		9087	0.9087

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/MPX2300DT1_IPC1752_v09.xml

http://www.freescale.com/mcds/MPX2300DT1_IPC1752_v11.xml

http://www.freescale.com/mcds/MPX2300DT1_IPC1752A.xml