

PART INFORMATION		
Mfg Item Number		MPX5100DP
Mfg Item Name		6 PIN UNIBODY DUAL PORT
SUPPLIER		
Company Name		Freescale Semiconductor Inc
Company Unique ID		14-141-7928
Response Date		2013-06-19
Response Document ID		0877K50010S198A1.22
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		MPX5100DP
Mfg Item Name		6 PIN UNIBODY DUAL PORT
Version		ALL
Weight		5.241450
UoM		g
Unit Volume		EACH
J-STD-020 MSL Rating		
Peak Processing Temperature		220 C
Max Time at Peak Temperature		30 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%
Die Encapsulant	1.01505						g					
Die Encapsulant		Antimony/Antimony Compounds	Antimony trioxide	1309-64-4		0.02445052	g	24088	2.4088		4664	0.4664
Die Encapsulant		Flame Retardants	Bromophenol, formaldehyde, epichlorohydrin polymer	68541-56-0		0.03260036	g	32117	3.2117		6219	0.6219
Die Encapsulant		Plastics/polymers	Formaldehyde, polymer with 2-methylphenol, glycidyl ether	64425-89-4		0.16300079	g	160584	16.0584		31098	3.1098
Die Encapsulant		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00289154	g	2760	0.276		534	0.0534
Die Encapsulant		Lead/Lead Compounds	Lead	7439-92-1		0.00091132	g	13	0.0013		2	0.0002
Die Encapsulant		Solvents, additives, and other materials	(3,4-Epoxy)cyclohexylmethytrimethoxysilane	3388-04-3		0.00366738	g	3613	0.3613		699	0.0699
Die Encapsulant		Plastics/polymers	Phenol, polymer with formaldehyde	9003-35-4		0.09676286	g	94343	9.4343		18270	1.827
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.69275335	g	682482	68.2482		132168	13.2168
Non-Conductive Epoxy/Adhesive	0.0078						g					
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Silicone gum	67762-94-1		0.0008053	g	10324	1.0324		15	0.0015
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	68083-18-1		0.00095871	g	122911	12.2911		182	0.0182
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00306784	g	393313	39.3313		585	0.0585
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Proprietary Material-Other siloxanes and silicones	-		0.00172566	g	221239	22.1239		329	0.0329
Non-Conductive Epoxy/Adhesive		Glass	D4 and HMDZ treated Silicon Dioxide	68937-51-9		0.00115045	g	147493	14.7493		219	0.0219
Non-Conductive Epoxy/Adhesive		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.00072861	g	93412	9.3412		139	0.0139
Non-Conductive Epoxy/Adhesive		Metals	Titanium (IV) Oxide	13463-67-7		0.0000882	g	11308	1.1308		16	0.0016
Port	3.4436						g					
Port		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.103308	g	30000	3		19709	1.9709
Port		Antimony/Antimony Compounds	Antimony trioxide	1309-64-4		0.103308	g	30000	3		19709	1.9709
Port		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0189398	g	5500	0.55		3613	0.3613
Port		Plastics/polymers	Polybutylene terephthalate (PBT)	30965-26-5		2.5293242	g	734500	73.45		482582	48.2582
Port		Glass	Fibrous-glass-wool	65997-17-3		0.68872	g	200000	20		131398	13.1398
Bonding Wire	0.001						g					
Bonding Wire		Metals	Gold, metal	7440-57-5		0.001	g	1000000	100		190	0.019
Gel Die Encapsulant	0.1503						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other inorganic fluorine compounds and their aqueous salts	-		0.1503	g	1000000	100		28675	2.8675
Copper Lead Frame	0.3125						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.302535	g	968112	96.8112		57719	5.7719
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0.00033125	g	100	0.01		5	0.0005
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.00681675	g	21620	2.162		1300	0.13
Copper Lead Frame		Lead/Lead Compounds	Lead	7439-92-1		0.000005	g	16	0.0016		0	0
Copper Lead Frame		Nickel (external applications only)	Nickel	7440-02-0		0.00261781	g	8377	0.8377		499	0.0499
Copper Lead Frame		Metals	Palladium, metal	7440-05-3		0.00013313	g	426	0.0426		25	0.0025
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00335906	g	1149	0.1149		68	0.0068
Bonding Agent	0.3073						g					
Bonding Agent		Metals	Proprietary Material-Other aluminum compounds	-		0.138285	g	450000	45		26382	2.6382
Bonding Agent		Solvents, additives, and other materials	Other guanidine compounds	-		0.0076825	g	25000	2.5		1465	0.1465
Bonding Agent		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.0076825	g	25000	2.5		1465	0.1465
Bonding Agent		Plastics/polymers	Other phenolic resins	-		0.15365	g	500000	50		29314	2.9314
Silicon Semiconductor Die	0.0039						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%),	-		0.000078	g	20000	2		14	0.0014
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.003822	g	980000	98		729	0.0729

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 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/MPX5100DP\\_IPC1752\\_v11.xml](http://www.freescale.com/mcds/MPX5100DP_IPC1752_v11.xml)

[http://www.freescale.com/mcds/MPX5100DP\\_IPC1752A.xml](http://www.freescale.com/mcds/MPX5100DP_IPC1752A.xml)