

PART INFORMATION		
Mfg Item Number		MPXV5004GC7U
Mfg Item Name		SMOUTLN DIP W/AXIAL PORT
SUPPLIER		
Company Name		Freescale Semiconductor Inc
Company Unique ID		14-141-7928
Response Date		2013-01-08
Response Document ID		0883K50010S211A1.23
Contact Name		Freescale Semiconductor Inc
Contact Title		Product Technical Support
Contact Phone		1-800-521-6274
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		No
Plating Indicator		e4
EU RoHS Exemption(s)		
MANUFACTURING		
Mfg Item Number		MPXV5004GC7U
Mfg Item Name		SMOUTLN DIP W/AXIAL PORT
Version		ALL
Weight		1.303800
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	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%
Non-Conductive Epoxy/Adhesive	0.0028						g					
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.000008	g	2681	0.2681		6	0.0006
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Other siloxanes and silicones	-		0.002342	g	836461	83.6461		1796	0.1796
Non-Conductive Epoxy/Adhesive		Glass	Other silica compounds	-		0.00045	g	160858	16.0858		345	0.0345
Cap/Cover	0.1958						g					
Cap/Cover		Metals	Chromium, metal	7440-47-3		0.035286	g	180216	18.0216		27063	2.7063
Cap/Cover		Solvents, additives, and other materials	Sulfur	7704-34-9		0.000059	g	300	0.03		45	0.0045
Cap/Cover		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.000078	g	400	0.04		59	0.0059
Cap/Cover		Solvents, additives, and other materials	Silicon	7440-21-3		0.00147	g	7509	0.7509		1127	0.1127
Cap/Cover		Metals	Iron, metal	7439-89-6		0.156947	g	801563	80.1563		120378	12.0378
Cap/Cover		Metals	Manganese, metal	7439-96-5		0.00196	g	10012	1.0012		1503	0.1503
Port	0.2535						g					
Port		Metals	Antimony, metal	7440-36-0		0.002535	g	10000	1		1944	0.1944
Port		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.002535	g	10000	1		1944	0.1944
Port		Plastics/polymers	Polybutylene terephthalate (PBT)	30965-26-5		0.111539	g	440000	44		85550	8.555
Port		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.084923	g	335000	33.5		65135	6.5135
Port		Glass	Fibrous-glass-wool	65997-17-3		0.051968	g	205000	20.5		39858	3.9858
Bonding Wire	0.001						g					
Bonding Wire		Metals	Gold, metal	7440-57-5		0.001	g	1000000	100		766	0.0766
Gel Die Encapsulant	0.028						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other inorganic fluorine compounds and their aqueous salts	-		0.028	g	1000000	100		21475	2.1475
Copper Lead Frame	0.7929						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-9		0.182267	g	229874	22.9874		139798	13.9798
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0.000171	g	216	0.0216		131	0.0131
Copper Lead Frame		Solvents, additives, and other materials	Proprietary Material-inorganic compounds	-		0.117834	g	148612	14.8612		90378	9.0378
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.000156	g	197	0.0197		119	0.0119
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.004443	g	5603	0.5603		3407	0.3407
Copper Lead Frame		Lead, metallic lead and lead alloys		7439-92-1		0.000033	g	41	0.0041		25	0.0025
Copper Lead Frame		Metals	Nickel, metal	7440-02-0		0.006577	g	8295	0.8295		5044	0.5044
Copper Lead Frame		Metals	Palladium, metal	7440-05-3		0.000335	g	422	0.0422		256	0.0256
Copper Lead Frame		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.361065	g	455373	45.5373		276941	27.6941
Copper Lead Frame		Glass	Fibrous-glass-wool	65997-17-3		0.119726	g	150997	15.0997		91829	9.1829
Copper Lead Frame		Metals	Tin, metal	7440-31-5		0.000057	g	72	0.0072		43	0.0043
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.000236	g	298	0.0298		181	0.0181
Bonding Agent	0.0212						g					
Bonding Agent		Metals	Proprietary Material-Other aluminum compounds	-		0.00954	g	450000	45		7317	0.7317
Bonding Agent		Solvents, additives, and other materials	Other guanidine compounds	-		0.00053	g	25000	2.5		406	0.0406
Bonding Agent		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00053	g	25000	2.5		406	0.0406
Bonding Agent		Plastics/polymers	Other phenolic resins	-		0.0106	g	500000	50		8130	0.813
Silicon Semiconductor Die	0.0086						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000172	g	20000	2		131	0.0131
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.008428	g	980000	98		6464	0.6464

LINKS	
MCD LINK	
Freescal website	http://www.freescal.com
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescal_Response.pdf
China RoHS	http://www.freescal.com/chinarohs
REACH signed letter	http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescal_Response.pdf
ELV signed letter	http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescal_Reponse.pdf
Conflict Minerals statement	http://www.freescal.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescal_Response.pdf
FREESCALE ENVIRONMENTAL INFORMATION	
EPP website	http://www.freescal.com/epp
FAQ	http://www.freescal.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ
Technical Service Request	https://www.freescal.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.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf
Blank IPC1752 v1.1 Form	http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

IPC1752 XML LINKS

http://www.freescale.com/mcds/MPXV5004GC7U_IPC1752_v09.xml

http://www.freescale.com/mcds/MPXV5004GC7U_IPC1752_v11.xml

http://www.freescale.com/mcds/MPXV5004GC7U_IPC1752A.xml