

PART INFORMATION	
Mfg Item Number	MPVZ5004GW7U
Mfg Item Name	SOP 8 W/M-PORT
SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2016-03-17
Response Document ID	0861K50010S290A1.26
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
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Representative Email	eppanlst@freescale.com
URL for Additional Information	www.freescale.com
DECLARATION	
EU RoHS	Yes
Pb Free	Yes
HalogenFree	No
Plating Indicator	
EU RoHS Exemption(s)	
MANUFACTURING	
Mfg Item Number	MPVZ5004GW7U
Mfg Item Name	SOP 8 W/M-PORT
Version	ALL
Weight	1.270600
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%
Non-Conductive Epoxy/Adhesive	0.0028						g					
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Silicone gum	67762-04-1		0.00002891	g	10324	1.0324		22	0.0022
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	68083-18-1		0.00034415	g	122911	12.2911		270	0.027
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00110128	g	383313	39.3313		866	0.0866
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Proprietary Material-Other siloxanes and silicones	-		0.00061947	g	221236	22.1236		487	0.0487
Non-Conductive Epoxy/Adhesive		Glass	D4 and HMDZ treated Silicon Dioxide	68937-51-9		0.00041298	g	147493	14.7493		325	0.0325
Non-Conductive Epoxy/Adhesive		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.00026155	g	93412	9.3412		205	0.0205
Non-Conductive Epoxy/Adhesive		Metals	Titanium (IV) Oxide	13463-67-7		0.00003166	g	11308	1.1308		24	0.0024
Part	0.2535						g					
Part		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.007605	g	30900	3		5985	0.5985
Part		Antimony/Antimony Compounds	Antimony trioxide	1309-64-4		0.007605	g	30900	3		5985	0.5985
Part		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00139425	g	5500	0.55		1097	0.1097
Part		Plastics/polymers	Polybutylene terephthalate (PBT)	30965-26-5		0.18619575	g	734500	73.45		146541	14.6541
Part		Glass	Fibrous-glass-wool	65997-17-3		0.0507	g	203000	20		39902	3.9902
Copper Lead Frame	0.7485						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.17206069	g	229674	22.9674		135416	13.5416
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0.00016168	g	216	0.0216		127	0.0127
Copper Lead Frame		Solvents, additives, and other materials	Proprietary Material-inorganic compounds	-		0.1112806	g	148612	14.8612		87546	8.7546
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00014745	g	197	0.0197		116	0.0116
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.00419385	g	5603	0.5603		3200	0.32
Copper Lead Frame		Lead/Lead Compounds	Lead	7439-92-1		0.00003069	g	41	0.0041		24	0.0024
Copper Lead Frame		Nickel (external applications only)	Nickel	7440-02-0		0.00620881	g	8295	0.8295		4886	0.4886
Copper Lead Frame		Metals	Palladium, metal	7440-05-3		0.00031587	g	422	0.0422		248	0.0248
Copper Lead Frame		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.34084669	g	455373	45.5373		268277	26.8277
Copper Lead Frame		Glass	Fibrous-glass-wool	65997-17-3		0.11302125	g	150997	15.0997		88951	8.8951
Copper Lead Frame		Metals	Tin, metal	7440-31-5		0.00005389	g	72	0.0072		42	0.0042
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00022305	g	298	0.0298		175	0.0175
Bonding Agent	0.0212						g					
Bonding Agent		Metals	Proprietary Material-Other aluminum compounds	-		0.00954	g	450000	45		7508	0.7508
Bonding Agent		Solvents, additives, and other materials	Other guanidine compounds	-		0.00053	g	25000	2.5		417	0.0417
Bonding Agent		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00053	g	25000	2.5		417	0.0417
Bonding Agent		Plastics/polymers	Other phenolic resins	-		0.0106	g	500000	50		8342	0.8342
Silicon Semiconductor Die	0.0106						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%),	-		0.000212	g	20000	2		166	0.0166
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.010388	g	980000	98		8175	0.8175
Gel Die Encapsulant	0.0186						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Fluorosilicone monomer (fluorosilicone rubber)	2374-14-3		0.014508	g	780000	78		11418	1.1418
Gel Die Encapsulant		Plastics/polymers	Oxetane, 2,2,3,3-tetrafluoro-homopolymer, fluorinated	113114-19-5		0.004092	g	220000	22		3220	0.322
Gel Die Encapsulant	0.0186						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Fluorosilicone monomer (fluorosilicone rubber)	2374-14-3		0.014508	g	780000	78		11418	1.1418
Gel Die Encapsulant		Plastics/polymers	Oxetane, 2,2,3,3-tetrafluoro-homopolymer, fluorinated	113114-19-5		0.004092	g	220000	22		3220	0.322
Bonding Wire	0.001						g					
Bonding Wire		Metals	Gold, metal	7440-57-5		0.001	g	1000000	100		787	0.0787
Cap/Cover	0.1958						g					
Cap/Cover		Metals	Chromium, metal	7440-47-3		0.03608007	g	184270	18.427		28396	2.8396
Cap/Cover		Metals	Copper, metal	7440-50-8		0.00049028	g	2504	0.2504		385	0.0385
Cap/Cover		Solvents, additives, and other materials	Sulfur	7704-34-9		0.00000979	g	50	0.005		7	0.0007
Cap/Cover		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00003427	g	175	0.0175		26	0.0026
Cap/Cover		Silicon	Silicon	7440-21-3		0.00098037	g	5007	0.5007		771	0.0771
Cap/Cover		Metals	Iron, metal	7439-89-6		0.13918971	g	710877	71.0877		109546	10.9546
Cap/Cover		Metals	Manganese, metal	7439-96-5		0.00225503	g	11517	1.1517		1774	0.1774
Cap/Cover		Nickel (external applications only)	Nickel	7440-02-0		0.01647128	g	84123	8.4123		12963	1.2963
Cap/Cover		Metals	Titanium, metal	7440-32-6		0.000196	g	1001	0.1001		154	0.0154
Cap/Cover		Solvents, additives, and other materials	Carbon	7440-44-0		0.0000932	g	476	0.0476		73	0.0073

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/MPVZ5004GW7U_IPC1752_v11.xml

http://www.freescale.com/mcds/MPVZ5004GW7U_IPC1752A.xml