

PART INFORMATION

Mfg Item Number	MPVZ5004GC6U
Mfg Item Name	SMOUTLN SMT W/AXIAL PORT

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2016-03-17
Response Document ID	0882K50010S514A1.15
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	
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MPVZ5004GC6U
Mfg Item Name	SMOUTLN SMT W/AXIAL PORT
Version	ALL
Weight	1.333700
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	
Peak Processing Temperature	245 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	<p>6(a) : Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight</p> <p>6(b) : Lead as an alloying element in aluminium containing up to 0.4% lead by weight</p> <p>6(c) : Copper alloy containing up to 4% lead by weight</p> <p>7(a) : Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)</p> <p>7(b) : Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission, and network management for telecommunications</p> <p>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</p> <p>7(c)-II : Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher</p> <p>7(c)-III : Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC</p> <p>7(c)-IV : Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors</p> <p>15 : Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages</p>

MATERIAL COMPOSITION

Homogeneous Material	Weight	SubstanceClass	Substance	CAS	Exemption	SubstanceWeight	UoM	SubPart PPM	SubPart%	ARTICLEPPM	ARTICLE%
Gel Die Encapsulant	0.028						g				
Gel Die Encapsulant		Solvents, additives, and other materials	Fluorosilicone monomer (fluorosilicone rubber)	2374-14-3		0.021	g	750000	75	15745	1.5745
Gel Die Encapsulant		Solvents, additives, and other materials	Plastics: Perfluoropropylether polymer	-		0.007	g	250000	25	5248	0.5248
Gel Die Encapsulant	0.028						g				
Gel Die Encapsulant		Solvents, additives, and other materials	Fluorosilicone monomer (fluorosilicone rubber)	2374-14-3		0.0224	g	800000	80	16795	1.6795
Gel Die Encapsulant		Solvents, additives, and other materials	Plastics: Perfluoropropylether polymer	-		0.0056	g	200000	20	4198	0.4198
Non-Conductive Epoxy/Adhesive	0.0021						g				
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Silicone gum	67762-04-1		0.0002168	g	10324	1.0324	16	0.0016
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	68083-18-1		0.00025811	g	122911	12.2911	193	0.0193
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00082595	g	303313	30.3313	619	0.0619
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Proprietary Material-Other silicones and silicones	-		0.0004646	g	221239	22.1239	348	0.0348
Non-Conductive Epoxy/Adhesive		Glass	D4 and HMDZ treated Silicon Dioxide	68937-51-9		0.00030974	g	147493	14.7493	232	0.0232
Non-Conductive Epoxy/Adhesive		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.0019617	g	93412	9.3412	147	0.0147
Non-Conductive Epoxy/Adhesive		Metals	Titanium (IV) Oxide	13463-67-7		0.00023275	g	11308	1.1308	17	0.0017
Port	0.2535						g				
Port		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.002535	g	10000	1	1900	0.19
Port		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.002535	g	10000	1	1900	0.19
Port		Plastics/polymers	Polybutylene terephthalate (PBT)	30965-26-5		0.11154	g	440000	44	83632	8.3632
Port		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.0849225	g	336000	33.6	63674	6.3674
Port		Glass	Fibrous-glass-wool	65997-17-3		0.0519675	g	205000	20.5	38964	3.8964
Copper Lead Frame	0.7929						g				
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.43907075	g	553753	55.3753	329235	32.9235
Copper Lead Frame		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.01670799	g	21072	2.1072	12527	1.2527
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0.00682401	g	787	0.0787	467	0.0467
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00036711	g	463	0.0463	275	0.0275
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.01049165	g	13232	1.3232	7866	0.7866
Copper Lead Frame		Nickel (external applications only)	Nickel	7440-02-0		0.00568759	g	8283	0.8283	4924	0.4924
Copper Lead Frame		Metals	Palladium, metal	7440-05-3		0.00032192	g	406	0.0406	241	0.0241
Copper Lead Frame		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.10048184	g	126727	12.6727	75340	7.534
Copper Lead Frame		Glass	Fibrous-glass-wool	65997-17-3		0.21771052	g	274575	27.4575	163237	16.3237
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00055662	g	702	0.0702	417	0.0417
Bonding Agent	0.0212						g				
Bonding Agent		Metals	Proprietary Material-Other aluminum compounds	-		0.00954	g	450000	45	7153	0.7153
Bonding Agent		Solvents, additives, and other materials	Other guanidine compounds	-		0.00053	g	25000	2.5	397	0.0397
Bonding Agent		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00053	g	25000	2.5	397	0.0397
Bonding Agent		Plastics/polymers	Other phenolic resins	-		0.0106	g	500000	50	7947	0.7947
Silicon Semiconductor Die	0.0112						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000224	g	20000	2	167	0.0167
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.010976	g	980000	98	8229	0.8229
Bonding Wire	0.001						g				
Bonding Wire		Metals	Gold, metal	7440-57-5		0.001	g	1000000	100	749	0.0749
Cap/Cover	0.1958						g				
Cap/Cover		Metals	Chromium, metal	7440-47-3		0.03680007	g	184270	18.427	27052	2.7052
Cap/Cover		Metals	Copper, metal	7440-50-8		0.00049028	g	2504	0.2504	367	0.0367
Cap/Cover		Solvents, additives, and other materials	Sulfur	7704-34-9		0.00009079	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	25	0.0025
Cap/Cover		Solvents, additives, and other materials	Silicon	7440-21-3		0.00098037	g	5007	0.5007	735	0.0735
Cap/Cover		Metals	Iron, metal	7439-89-6		0.13918971	g	710877	71.0877	104363	10.4363
Cap/Cover		Metals	Manganese, metal	7439-96-5		0.00225503	g	11517	1.1517	1690	0.169
Cap/Cover		Nickel (external applications only)	Nickel	7440-02-0		0.01647128	g	84123	8.4123	12350	1.235
Cap/Cover		Metals	Titanium, metal	7440-32-6		0.000196	g	1001	0.1001	146	0.0146
Cap/Cover		Solvents, additives, and other materials	Carbon	7440-44-0		0.0000932	g	476	0.0476	69	0.0069

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/mcdfs/MPVZ5004GC6U_IPC1752_v11.xml

http://www.freescale.com/mcdfs/MPVZ5004GC6U_IPC1752A.xml