

PART INFORMATION		
Mfg Item Number		MP3V5004GVP
Mfg Item Name		SENSOR 8PIN GVP
SUPPLIER		
Company Name		Freescale Semiconductor Inc
Company Unique ID		14-141-7928
Response Date		2013-01-08
Response Document ID		0849K50010S255A1.8
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		MP3V5004GVP
Mfg Item Name		SENSOR 8PIN GVP
Version		ALL
Weight		1.530500
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	0.0025						g					
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.000007	g	2681	0.2681		4	0.0004
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Other siloxanes and silicones	-		0.002091	g	836461	83.6461		1366	0.1366
Non-Conductive Epoxy/Adhesive		Glass	Other silica compounds	-		0.000402	g	160858	16.0858		262	0.0262
Cap/Cover	0.1958						g					
Cap/Cover		Metals	Chromium, metal	7440-47-3		0.035286	g	180216	18.0216		23055	2.3055
Cap/Cover		Solvents, additives, and other materials	Sulfur	7704-34-9		0.000059	g	300	0.03		38	0.0038
Cap/Cover		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.000078	g	400	0.04		50	0.005
Cap/Cover		Solvents, additives, and other materials	Silicon	7440-21-3		0.00147	g	7509	0.7509		960	0.096
Cap/Cover		Metals	Iron, metal	7439-89-6		0.156947	g	801563	80.1563		102547	10.2547
Cap/Cover		Metals	Manganese, metal	7439-96-5		0.00196	g	10012	1.0012		1280	0.128
Port	0.5041						g					
Port		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.300423	g	595960	59.596		196292	19.6292
Port		Glass	Proprietary Material-Other glass compounds (without lead, chromium, cadmium or mercury)	-		0.203677	g	404040	40.404		133079	13.3079
Bonding Wire	0.0009						g					
Bonding Wire		Metals	Gold, metal	7440-57-5		0.0009	g	1000000	100		588	0.0588
Gel Die Encapsulant	0.037						g					
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other inorganic fluorine compounds and their aqueous salts	-		0.037	g	1000000	100		24175	2.4175
Copper Lead Frame	0.7763						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.42818	g	551565	55.1565		279772	27.9772
Copper Lead Frame		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.016473	g	21220	2.122		10763	1.0763
Copper Lead Frame		Metals	Gold, metal	7440-57-5		0.000614	g	791	0.0791		401	0.0401
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.000361	g	465	0.0465		235	0.0235
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.010321	g	13295	1.3295		6743	0.6743
Copper Lead Frame		Metals	Nickel, metal	7440-02-0		0.006461	g	8323	0.8323		4221	0.4221
Copper Lead Frame		Metals	Palladium, metal	7440-05-3		0.000317	g	408	0.0408		207	0.0207
Copper Lead Frame		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.09885	g	127335	12.7335		64586	6.4586
Copper Lead Frame		Glass	Fibrous-glass-wool	65997-17-3		0.214175	g	275892	27.5892		139938	13.9938
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.000548	g	706	0.0706		358	0.0358
Bonding Agent	0.0025						g					
Bonding Agent		Metals	Proprietary Material-Other aluminum compounds	-		0.001125	g	450000	45		735	0.0735
Bonding Agent		Solvents, additives, and other materials	Other guanidine compounds	-		0.000063	g	25000	2.5		41	0.0041
Bonding Agent		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.000063	g	25000	2.5		41	0.0041
Bonding Agent		Plastics/polymers	Other phenolic resins	-		0.001249	g	500000	50		816	0.0816
Silicon Semiconductor Die	0.0114						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000228	g	20000	2		148	0.0148
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.011172	g	980000	98		7299	0.7299

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 v0.9 Form	<a href="http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf">http://www.freescal.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v0.9_MCD_Template.pdf</a>
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/MP3V5004GVP\\_IPC1752\\_v09.xml](http://www.freescale.com/mcds/MP3V5004GVP_IPC1752_v09.xml)

[http://www.freescale.com/mcds/MP3V5004GVP\\_IPC1752\\_v11.xml](http://www.freescale.com/mcds/MP3V5004GVP_IPC1752_v11.xml)

[http://www.freescale.com/mcds/MP3V5004GVP\\_IPC1752A.xml](http://www.freescale.com/mcds/MP3V5004GVP_IPC1752A.xml)