

PART INFORMATION

Mfg Item Number	MPXM2202DT1
Mfg Item Name	SNSR M-PAK 05

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2011-11-16
Response Document ID	0884K50010S209A1.16
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	Yes
Plating Indicator	e4
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MPXM2202DT1
Mfg Item Name	SNSR M-PAK 05
Version	ALL
Weight	0.374800
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	
Peak Processing Temperature	250 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%
Non-Conductive Epoxy/Adhesive	0.0041						g				
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Silicone gum	67762-94-1		0.00004233	g	10324	1.0324	112	0.0112
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and Silicones, di-Me, Me vinyl, vinyl group-terminated	68083-18-1		0.00050394	g	122911	12.2911	1344	0.1344
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2		0.00161258	g	383313	38.3313	4302	0.4302
Non-Conductive Epoxy/Adhesive		Solvents, additives, and other materials	Proprietary Material-Other siloxanes and silicones	-		0.00090708	g	221238	22.1238	2420	0.242
Non-Conductive Epoxy/Adhesive		Glass	D4 and HMO2 treated Silicon Dioxide	68937-51-9		0.00060472	g	147493	14.7493	1613	0.1613
Non-Conductive Epoxy/Adhesive		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.00036289	g	93412	9.3412	1021	0.1021
Non-Conductive Epoxy/Adhesive		Metals	Titanium (IV) Oxide	13463-67-7		0.00004636	g	11308	1.1308	123	0.0123
Cap/Cover	0.0766						g				
Cap/Cover		Metals	Aluminum, metal and alloys	7429-90-5		0.00020445	g	2699	0.2699	545	0.0545
Cap/Cover		Metals	Chromium, metal and alloys	7440-47-3		0.013113	g	171188	17.1188	34988	3.4988
Cap/Cover		Metals	Copper, metal and alloys	7440-50-8		0.00009493	g	63	0.0063	12	0.0012
Cap/Cover		Sulfur	Sulfur	7704-34-9		0.0000154	g	201	0.0201	41	0.0041
Cap/Cover		Solvents, additives, and other materials	Nitrogen peroxide	10102-44-0		0.00023141	g	3021	0.3021	517	0.0517
Cap/Cover		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.00017358	g	2266	0.2266	463	0.0463
Cap/Cover		Solvents, additives, and other materials	Silicon	7440-21-3		0.00034707	g	4531	0.4531	505	0.0505
Cap/Cover		Metals	Iron, metal and alloys	7439-89-6		0.05592288	g	73064	73.064	140207	14.0207
Cap/Cover		Metals	Manganese, metal and alloys	7439-96-5		0.00173553	g	2267	0.2267	463	0.0463
Cap/Cover		Nickel (external applications only)	Nickel	7440-02-0		0.00327825	g	42797	4.2797	5746	0.5746
Cap/Cover		Metals	Titanium (IV) Oxide	13463-67-7		0.00131132	g	17119	1.7119	3498	0.3498
Cap/Cover		Solvents, additives, and other materials	Carbon	7440-44-0		0.00026228	g	3424	0.3424	699	0.0699
Bonding Wire	0.0005						g				
Bonding Wire		Metals	Gold, metal and alloys	7440-57-5		0.0005	g	1000000	100	1334	0.1334
Gel Die Encapsulant	0.0155						g				
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other siloxanes and silicones	-		0.01474082	g	951021	95.1021	39329	3.9329
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl Cyclohexanes	70900-21-9		0.00004745	g	3061	0.3061	126	0.0126
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl Siloxane	69430-24-6		0.00071173	g	45918	4.5918	1898	0.1898
Copper Lead Frame	0.2729						g				
Copper Lead Frame		Metals	Copper, metal and alloys	7440-50-8		0.12315595	g	451286	45.1286	328609	32.8609
Copper Lead Frame		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.00712296	g	26101	2.6101	19004	1.9004
Copper Lead Frame		Metals	Gold, metal and alloys	7440-57-5		0.00031138	g	1141	0.1141	830	0.083
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.0001037	g	380	0.038	276	0.0276
Copper Lead Frame		Metals	Iron, metal and alloys	7439-89-6		0.00298833	g	10877	1.0877	7919	0.7919
Copper Lead Frame		Nickel (external applications only)	Nickel	7440-02-0		0.00356517	g	13064	1.3064	9512	0.9512
Copper Lead Frame		Metals	Palladium, metal and alloys	7440-05-3		0.00017302	g	634	0.0634	461	0.0461
Copper Lead Frame		Plastics/polymers	Polyphenylene Sulfide (PPS)	26125-40-6		0.04273969	g	156613	15.6613	114033	11.4033
Copper Lead Frame		Glass	Fibrous-glass-wool	65997-17-3		0.00280234	g	338327	33.8327	247071	24.7071
Copper Lead Frame		Metals	Zinc, metal and alloys	7440-66-6		0.00015746	g	577	0.0577	420	0.042
Silicon Semiconductor Die	0.0052						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000104	g	20000	2	277	0.0277
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.005096	g	980000	98	13596	1.3596

LINKS

MCD LINK

Freescale website <http://www.freescale.com>

GENERAL ENVIRONMENTAL COMPLIANCE LINKS

RoHS signed letter http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ROHS_Freescale_Response.pdf

China RoHS <http://www.freescale.com/chinarohs>

REACH signed letter http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_REACH_Freescale_Response.pdf

ELV signed letter http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_ELV_Freescale_Reponse.pdf

Conflict Minerals statement http://www.freescale.com/files/abstract/corporate/ehs_epp/ENV_CONFLICT_METAL_Freescale_Response.pdf

FREESCALE ENVIRONMENTAL INFORMATION

EPP website <http://www.freescale.com/epp>

FAQ http://www.freescale.com/webapp/sps/site/overview.jsp?code=ENVIRON_FAQ

Technical Service Request https://www.freescale.com/webapp/servicerequest.create_SR.framework?defaultCategory=Hardware Product Support&defaultTopic=Environmentally Preferred Prod

LINKS TO BLANK IPC1752 FORMS

Blank IPC1752 v1.1 Form http://www.freescale.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

IPC1752 XML LINKS

http://www.freescale.com/mcdfs/MPXM2202DT1_IPC1752_v11.xml

http://www.freescale.com/mcdfs/MPXM2202DT1_IPC1752A.xml