

**PART INFORMATION**

Mfg Item Number	MC68HC908JB8JPE
Mfg Item Name	PDIP 20

**SUPPLIER**

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2016-05-19
Response Document ID	0148K50005S074A1.8
Contact Name	Freescale Semiconductor Inc
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URL for Additional Information	www.freescale.com

**DECLARATION**

EU RoHS	Yes
Pb Free	Yes
HalogenFree	No
Plating Indicator	e3
EU RoHS Exemption(s)	

**MANUFACTURING**

Mfg Item Number	MC68HC908JB8JPE
Mfg Item Name	PDIP 20
Version	ALL
Weight	1.402550
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
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%
Die Encapsulant	0.88755						g				
Die Encapsulant		Antimony/Antimony Compounds	Antimony trioxide	1309-64-4		0.0088755	g	10000	1	6328	0.6328
Die Encapsulant		Flame Retardants	Brominated Epoxy	68928-70-1		0.0088755	g	10000	1	6328	0.6328
Die Encapsulant		Plastics/polymers	Epoxy resin, EPON Resin 8091	25928-94-3		0.131325	g	150000	15	94921	9.4921
Die Encapsulant		Plastics/polymers	Phenol, polymer with formaldehyde	9003-35-4		0.071004	g	80000	8	50624	5.0624
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.6656625	g	750000	75	474618	47.4618
Epoxy Die Attach	0.0027						g				
Epoxy Die Attach		Solvents, additives, and other materials	Proprietary Material-Other aromatic amines	-		0.00015076	g	55838	5.5838	107	0.0107
Epoxy Die Attach		Solvents, additives, and other materials	2,2'-(methylenedi(o-phenyleneoxymethylene))bisoxirane	54208-63-8		0.00015076	g	55838	5.5838	107	0.0107
Epoxy Die Attach		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.00027411	g	101523	10.1523	195	0.0195
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.00212437	g	786801	78.6801	1514	0.1514
Copper Lead Frame	0.4655						g				
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.44872104	g	963955	96.3955	319932	31.9932
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00038404	g	825	0.0825	273	0.0273
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.01093925	g	23500	2.35	7799	0.7799
Copper Lead Frame		Lead/Lead Compounds	Lead	7439-92-1		0.00007914	g	170	0.017	56	0.0056
Copper Lead Frame		Metals	Silver, metal	7440-22-4		0.004655	g	10000	1	3318	0.3318
Copper Lead Frame		Metals	Tin, metal	7440-31-5		0.00013965	g	300	0.03	99	0.0099
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00058188	g	1250	0.125	414	0.0414
Bonding Wire	0.0034						g				
Bonding Wire		Metals	Gold, metal	7440-57-5		0.0034	g	1000000	100	2424	0.2424
Silicon Semiconductor Die	0.0219						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000438	g	20000	2	312	0.0312
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.021462	g	980000	98	15302	1.5302
Lead Frame Plating	0.0215						g				
Lead Frame Plating		Lead/Lead Compounds	Lead	7439-92-1		0.0000043	g	200	0.02	3	0.0003
Lead Frame Plating		Metals	Tin, metal	7440-31-5		0.0214957	g	999800	99.98	15326	1.5326

## LINKS

MCD LINK	
NXP website	<a href="http://www.nxp.com">http://www.nxp.com</a>
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
RoHS signed letter	<a href="http://www.nxp.com/files/corporate/doc/support_info/NXP-ROHS-DECLARATION.pdf">http://www.nxp.com/files/corporate/doc/support_info/NXP-ROHS-DECLARATION.pdf</a>
China RoHS	<a href="http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/china-rohs:ENV_CHINA_ROHS_STRATEGY">http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/china-rohs:ENV_CHINA_ROHS_STRATEGY</a>
REACH signed letter	<a href="http://www.nxp.com/files/corporate/doc/support_info/NXP-REACH-STATEMENT.pdf">http://www.nxp.com/files/corporate/doc/support_info/NXP-REACH-STATEMENT.pdf</a>
ELV signed letter	<a href="http://www.nxp.com/files/corporate/doc/support_info/NXP-ELV-STATEMENT.pdf">http://www.nxp.com/files/corporate/doc/support_info/NXP-ELV-STATEMENT.pdf</a>
Conflict Minerals statement	<a href="http://www.nxp.com/files/corporate/doc/support_info/NXP-STATEMENT-CONFLICT-MINERALS.pdf">http://www.nxp.com/files/corporate/doc/support_info/NXP-STATEMENT-CONFLICT-MINERALS.pdf</a>
NXP ENVIRONMENTAL INFORMATION	
Environmental Compliance website	<a href="http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization:ABUENVPRFPRDX">http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization:ABUENVPRFPRDX</a>
FAQ	<a href="http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/eco-product-faqs:ENVIRON_FAQ">http://www.nxp.com/about/corporate-responsibility/environmental-compliance-organization/eco-product-faqs:ENVIRON_FAQ</a>
Technical Service Request	<a href="http://www.nxp.com/support/sales-and-support:SUPPORTHOME">http://www.nxp.com/support/sales-and-support:SUPPORTHOME</a>
LINKS TO BLANK IPC1752 FORMS	
Blank IPC1752 v1.1 Form	<a href="http://www.NXP.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf">http://www.NXP.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf</a>

IPC1752 XML LINKS

[http://www.freescale.com/mcdfs/MC68HC908JB8JPE\\_IPC1752\\_v11.xml](http://www.freescale.com/mcdfs/MC68HC908JB8JPE_IPC1752_v11.xml)

[http://www.freescale.com/mcdfs/MC68HC908JB8JPE\\_IPC1752A.xml](http://www.freescale.com/mcdfs/MC68HC908JB8JPE_IPC1752A.xml)