

PART INFORMATION

Mfg Item Number	MPC17511EV
Mfg Item Name	S MFP16 0.65MM EIAJ-2

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2012-03-21
Response Document ID	6083K50006S001A1.12
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	Yes
Plating Indicator	e6
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	MPC17511EV
Mfg Item Name	S MFP16 0.65MM EIAJ-2
Version	ALL
Weight	0.130300
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	3
Peak Processing Temperature	260 C
Max Time at Peak Temperature	40 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%
Bonding Wire	0.0003						g				
Bonding Wire		Metals	Gold, metal	7440-57-5		0.0003	g	1000000	100	2302	0.2302
Silicon Semiconductor Die	0.0025						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00005	g	20000	2	383	0.0383
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00245	g	880000	98	18802	1.8802
Lead Frame Plating	0.0006						g				
Lead Frame Plating		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.000018	g	30000	3	138	0.0138
Lead Frame Plating		Lead/Lead Compounds	Lead	7439-92-1		0.00000008	g	125	0.0125	0	0
Lead Frame Plating		Metals	Tin, metal	7440-31-5		0.00058192	g	968875	96.9875	4466	0.4466
Epoxy Die Attach	0.0001						g				
Epoxy Die Attach		Solvents, additives, and other materials	Other acrylates	-		0.0000055	g	55000	5.5	42	0.0042
Epoxy Die Attach		Solvents, additives, and other materials	Acrylonitrile/Butadiene copolymer, carboxyl terminated (2674)	68891-46-3		0.000002	g	20000	2	15	0.0015
Epoxy Die Attach		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.0000025	g	25000	2.5	19	0.0019
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.000076	g	760000	76	583	0.0583
Epoxy Die Attach		Plastics/polymers	Proprietary Material-Polybutadiene compounds	-		0.0000055	g	55000	5.5	42	0.0042
Epoxy Die Attach		Plastics/polymers	Other acrylic resins	-		0.0000085	g	85000	8.5	65	0.0065
Copper Lead Frame	0.043						g				
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.04145006	g	963955	96.3955	318112	31.8112
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus	7723-14-0		0.00002548	g	825	0.0825	272	0.0272
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.0010105	g	23500	2.35	7755	0.7755
Copper Lead Frame		Lead/Lead Compounds	Lead	7439-92-1		0.00000731	g	170	0.017	56	0.0056
Copper Lead Frame		Metals	Silver, metal	7440-22-4		0.00043	g	10000	1	3200	0.32
Copper Lead Frame		Metals	Tin, metal	7440-31-5		0.0000129	g	300	0.03	99	0.0099
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00005375	g	1250	0.125	412	0.0412
Die Encapsulant, Halogen-free	0.0838						g				
Die Encapsulant, Halogen-free		Metals	Aluminum, metal	7429-90-5		0.00078747	g	9397	0.9397	6043	0.6043
Die Encapsulant, Halogen-free		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00078747	g	9397	0.9397	6043	0.6043
Die Encapsulant, Halogen-free		Plastics/polymers	Proprietary Material-Other epoxy resins	-		0.00580214	g	69238	6.9238	44529	4.4529
Die Encapsulant, Halogen-free		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00024863	g	2967	0.2967	1908	0.1908
Die Encapsulant, Halogen-free		Metals	Magnesium, metal	7439-95-4		0.00078747	g	9397	0.9397	6043	0.6043
Die Encapsulant, Halogen-free		Solvents, additives, and other materials	Other organic phosphorous compounds	-		0.00078747	g	9397	0.9397	6043	0.6043
Die Encapsulant, Halogen-free		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.00414441	g	49456	4.9456	31806	3.1806
Die Encapsulant, Halogen-free		Glass	Silica, vitreous	60676-86-0		0.07045494	g	840751	84.0751	540722	54.0722

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](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/MPC17511EV_IPC1752_v11.xml

http://www.freescale.com/mcdfs/MPC17511EV_IPC1752A.xml