

PART INFORMATION	
Mfg Item Number	MPC8572VTATLE
Mfg Item Name	FCPBGA 1023 33SQ2.75P1.0
SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-01-08
Response Document ID	8443K00211D006A1.23
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	No
HalogenFree	Yes
Plating Indicator	e2
EU RoHS Exemption(s)	15
MANUFACTURING	
Mfg Item Number	MPC8572VTATLE
Mfg Item Name	FCPBGA 1023 33SQ2.75P1.0
Version	ALL
Weight	12.966600
UoM	g
Unit Volume	EACH
J-STD-020 MSL Rating	3
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	4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemption List Version	2012/51/EU
Exemptions in this part	15:Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages
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. piezoelectric 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%
Capacitor, 0306	0.0782	Metals	Copper, metal	7440-50-8	0.0107916	g	138000	13.8	832	0.0832	
Capacitor, 0306		Nickel (external applications only)	Nickel	7440-02-0	0.015249	g	195000	19.5	1176	0.1176	
Capacitor, 0306		Metals	Tin, metal	7440-31-5	0.0010166	g	13000	1.3	78	0.0078	
Capacitor, 0306		Metals	Barium titanate	12047-27-7	0.0511426	g	654000	65.4	3944	0.3944	
Capacitor Solder Paste	0.0534	Metals	Copper, metal	7440-50-8	0.000267	g	5000	0.5	20	0.002	
Capacitor Solder Paste		Lead/Lead Compounds	Lead	7439-92-1	0.00000443	g	83	0.0083	0	0	
Capacitor Solder Paste		Metals	Silver, metal	7440-22-4	0.001602	g	30000	3	123	0.0123	
Capacitor Solder Paste		Metals	Tin, metal	7440-31-5	0.0512657	g	964917	96.4917	2973	0.3973	
Solder Balls - Pb Free, Sn/Ag	0.8343					g			2251	0.2251	
Solder Balls - Pb Free, Sn/Ag		Metals	Silver, metal	7440-22-4	0.0292005	g	35000	3.5	62090	6.209	
Solder Balls - Pb Free, Sn/Ag		Metals	Tin, metal	7440-31-5	0.0050995	g	965000	96.5			
High Pb Bumped Semiconductor D	0.3473				15	g					
High Pb Bumped Semiconductor D		Lead/Lead Compounds	Lead	7439-92-1	0.03270767	g	94177	9.4177	2522	0.2522	
High Pb Bumped Semiconductor D		Nickel (external applications only)	Nickel	7440-02-0	0.00028652	g	825	0.0825	22	0.0022	
High Pb Bumped Semiconductor D		Metals	Tin, metal	7440-31-5	0.00172122	g	4956	0.4956	132	0.0132	
High Pb Bumped Semiconductor D		Metals	Titanium, metal	7440-32-6	0.00001459	g	42	0.0042	1	0.0001	
High Pb Bumped Semiconductor D		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-	0.0031257	g	9000	0.9	241	0.0241	
High Pb Bumped Semiconductor D		Glass	Silicon, doped	-	0.3094443	g	891000	89.1	23864	2.3864	
Substrate Assembly, Halogen-fr	4.0514				15	g					
Substrate Assembly, Halogen-fr		Arsenic/Arsenic Compounds	Arsenic	7440-38-2	0.00002836	g	7	0.0007	2	0.0002	
Substrate Assembly, Halogen-fr		Metals	Barium sulfate	7727-43-7	0.01685788	g	4161	0.4161	1300	0.13	
Substrate Assembly, Halogen-fr		Metals	Copper, metal	7440-50-8	1.37619172	g	339683	33.9683	106133	10.6133	
Substrate Assembly, Halogen-fr		Plastics/polymers	2,2'[(1-methylethylene)bis(4,1-phenyleneoxyethylene)]bisoxirane	1675-54-3	0.02897561	g	7152	0.7152	2234	0.2234	
Substrate Assembly, Halogen-fr		Plastics/polymers	Other Epoxy resins	-	0.00361103	g	15701	1.5701	4905	0.4905	
Substrate Assembly, Halogen-fr		Plastics/polymers	Proprietary Material-Other Epoxy resins	-	0.17025603	g	42024	4.2024	13130	1.313	
Substrate Assembly, Halogen-fr		Lead/Lead Compounds	Lead	7439-92-1	0.00458213	g	1131	0.1131	353	0.0353	
Substrate Assembly, Halogen-fr		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxyp propane concentrate	25068-38-6	0.05909372	g	14586	1.4586	4557	0.4557	
Substrate Assembly, Halogen-fr		Plastics/polymers	Proprietary Material-Other phenolic resins	-	0.11449256	g	28260	2.826	8829	0.8829	
Substrate Assembly, Halogen-fr		Glass	Fibrous-glass-wool	65997-17-3	1.17051833	g	288917	28.8917	90271	9.0271	
Substrate Assembly, Halogen-fr		Glass	Silicon dioxide	7631-86-9	0.36661929	g	90492	9.0492	28274	2.8274	
Substrate Assembly, Halogen-fr		Metals	Silver, metal	7440-22-4	0.00094388	g	233	0.0233	72	0.0072	
Substrate Assembly, Halogen-fr		Metals	Tin, metal	7440-31-5	0.03086695	g	9396	0.9396	2935	0.2935	
Substrate Assembly, Halogen-fr		Metals	Aluminum Hydroxide	21645-51-2	0.63846418	g	157591	15.7591	49239	4.9239	
Substrate Assembly, Halogen-fr		Metals	Copper phthalocyanine	147-14-8	0.0029823	g	666	0.0666	208	0.0208	
Gel Die Encapsulant	0.0174					g					
Gel Die Encapsulant		Metals	Aluminum, metal	7429-90-5	0.01218	g	700000	70	939	0.0939	
Gel Die Encapsulant		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2	0.00174	g	100000	10	134	0.0134	
Gel Die Encapsulant		Metals	Zinc oxide	1314-13-2	0.00261	g	150000	15	201	0.0201	
Gel Die Encapsulant		Solvents, additives, and other materials	Proprietary Material-Other miscellaneous substances.	-	0.000522	g	30000	3	40	0.004	
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl Cyclosiloxanes	70900-21-9	0.000174	g	10000	1	13	0.0013	
Gel Die Encapsulant		Solvents, additives, and other materials	Dimethyl/methyl hydrogen siloxane	68037-59-2	0.000174	g	10000	1	13	0.0013	
Underfill	0.0726					g					
Underfill		Solvents, additives, and other materials	4,4'-Diamino-3,3'-diethyl-diphenylmethane	19900-65-3	0.007986	g	110000	11	615	0.0615	
Underfill		Bismuth/Bismuth Compounds	Bismuth nitrate	10361-44-1	0.0000726	g	1000	0.1	6	0.0005	
Underfill		Bismuth/Bismuth Compounds	Bismuth trioxide	1304-76-3	0.0005808	g	8000	0.8	44	0.0044	
Underfill		Plastics/polymers	1,6-Bis(2,3-epoxypropoxy) naphthalene	27610-48-6	0.010164	g	140000	14	783	0.0783	
Underfill		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5	0.00726	g	100000	10	559	0.0559	
Underfill		Solvents, additives, and other materials	Carbon Black	1333-86-4	0.0000726	g	1000	0.1	5	0.0005	
Underfill		Plastics/polymers	4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxyp propane concentrate	25068-38-6	0.002904	g	40000	4	223	0.0223	
Underfill		Glass	Silica, vitreous	60676-86-0	0.04356	g	600000	60	3359	0.3359	
Bonding Agent	0.072					g					
Bonding Agent		Solvents, additives, and other materials	Other organic compounds.	-	0.000108	g	1500	0.15	8	0.0008	
Bonding Agent		Solvents, additives, and other materials	3-(2,3-epoxypropoxy)propyltrimethoxysilane	2530-83-8	0.000216	g	3000	0.3	16	0.0016	
Bonding Agent		Solvents, additives, and other materials	Siloxanes and silicones, di-Me, vinyl group-terminated	68083-19-2	0.00888	g	540000	54	2998	0.2998	
Bonding Agent		Solvents, additives, and other materials	Other siloxanes and silicones	-	0.00216	g	30000	3	166	0.0166	
Bonding Agent		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7	0.0216	g	300000	30	1665	0.1665	
Bonding Agent		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-	0.0000144	g	200	0.02	1	0.0001	
Bonding Agent		Solvents, additives, and other materials	Dimethyl/methyl hydrogen siloxane	68037-59-2	0.00288	g	40000	4	222	0.0222	
Bonding Agent		Solvents, additives, and other materials	Silicic acid sodium salt hydrolysis products with chlorotrimethylsilane and dichloroethyltrimethylsilane	68584-83-8	0.00324	g	45000	4.5	249	0.0249	
Bonding Agent		Glass	Silylated silica	68909-20-6	0.00288	g	40000	4	222	0.0222	
Bonding Agent		Metals	Other platinum compounds	-	0.0000216	g	300	0.03	1	0.0001	
CapCover	7.44					g			568071	56.8071	
CapCover		Metals	Copper, metal	7440-50-8	7.3656	g	990000	99	5737	0.5737	
CapCover		Nickel (external applications only)	Nickel	7440-02-0	0.0744	g	10000	1			

**LINKS**

MCD LINK	
NXP website	<a href="http://www.nxp.com">http://www.nxp.com</a>
<b>GENERAL ENVIRONMENTAL COMPLIANCE LINKS</b>	
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>
<b>NXP ENVIRONMENTAL INFORMATION</b>	
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/mcds/MPC8572VTATLE\\_IPC1752\\_v11.xml](http://www.freescale.com/mcds/MPC8572VTATLE_IPC1752_v11.xml)

[http://www.freescale.com/mcds/MPC8572VTATLE\\_IPC1752A.xml](http://www.freescale.com/mcds/MPC8572VTATLE_IPC1752A.xml)