PART INFORMATION	
Mfg Item Number	MPC870ZT66
Mfg Item Name	PBGA 256 23*23*1.22P1.27

SUPPLIER	
Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-10-10
Response Document ID	5061K10792D030A1.32
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	No
Pb Free	No
HalogenFree	Yes
Plating Indicator	e0
EU RoHS Exemption(s)	

MANUFACTURING	
Mfg Item Number	MPC870ZT66
Mfg Item Name	PBGA 256 23*23*1.22P1.27
Version	ALL
Weight	1.724050
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	3 - Item(s) does not contain RoHS restricted substances per the definition above except for lead in solders and selected exemptions, if any
Supplier Acceptance	Accepted
Signature	Daniel Binyon
Exemption List Version	2012/51/EU
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

Homogeneous Material	Weight	SubstanceClass	Substance	CAS	Exemption	SubstanceWeight	UoM	SubPart PPM	SubPart%	ARTICLEPPM	ARTICLE%
Die Encapsulant	0.76215						g				
Die Encapsulant		Metals	Aluminum, metal	7429-90-5		0.02354739	g	30896	3.0896	13658	1.3658
Die Encapsulant		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.00000076	g	1	0.0001	0	0
Die Encapsulant		Cadmium/Cadmium Compounds	Cadmium	7440-43-9		0.00000076	g	1	0.0001	0	0
Die Encapsulant		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.02354739	g	30896	3.0896	13658	1.3658
Die Encapsulant		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.00235504	g	3090	0.309	1365	0.1365
Die Encapsulant		Lead/Lead Compounds	Lead	7439-92-1		0.00000076	g	1	0.0001	0	0
Die Encapsulant		Solvents, additives, and other materials	Other organic phosphorous compounds	-		0.00235504	g	3090	0.309	1365	0.1365
Die Encapsulant		Plastics/polymers	Proprietary Material-Other phenolic resins	-		0.0431697	g	56642	5.6642	25039	2.5039
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.66717316	g	875383	87.5383	387001	38.7001
Epoxy Die Attach	0.0171						g				
Epoxy Die Attach		Solvents, additives, and other materials	1,3,5-Triazine-2,4-diamine, 6-[2-(2-methyl-1H-imidazol-1-yl)ethyl]	38668-46-1		0.00014451	g	8451	0.8451	83	0.0083
Epoxy Die Attach		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.0022158	g	129579	12.9579	1285	0.1285
Epoxy Die Attach		Plastics/polymers	4,4'-Dihydroxydiphenyl	92-88-6		0.00014451	g	8451	0.8451	83	0.0083
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.01459518	g	853519	85.3519	8465	0.8465
Solder Balls - Low Lead	0.4952						g				
Solder Balls - Low Lead		Metals	Aluminum, metal	7429-90-5		0.00000396	g	8	0.0008	2	0.0002
Solder Balls - Low Lead		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.00000347	g	7	0.0007	2	0.0002
Solder Balls - Low Lead		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.0000099	g	20	0.002	5	0.0005
Solder Balls - Low Lead		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00000545	g	11	0.0011	3	0.0003
Solder Balls - Low Lead		Metals	Copper, metal	7440-50-8		0.00000495	g	10	0.001	2	0.0002
Solder Balls - Low Lead		Metals	Iron, metal	7439-89-6		0.00000842	g	17	0.0017	4	0.0004
Solder Balls - Low Lead		Lead/Lead Compounds	Lead	7439-92-1		0.17828091	g	360018	36.0018	103408	10.3408
Solder Balls - Low Lead		Nickel (external applications only)	Nickel	7440-02-0		0.00001832	g	37	0.0037	10	0.001
Solder Balls - Low Lead		Metals	Silver, metal	7440-22-4		0.00986339	g	19918	1.9918	5721	0.5721
Solder Balls - Low Lead		Metals	Tin, metal	7440-31-5		0.30699776	g	619947	61.9947	178067	17.8067
Solder Balls - Low Lead		Metals	Zinc, metal	7440-66-6		0.00000347	g	7	0.0007	2	0.0002
Silicon Semiconductor Die	0.0639						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.001278	g	20000	2	741	0.0741
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.062622	g	980000	98	36322	3.6322
Bonding Wire, Copper	0.0143						g				
Bonding Wire, Copper		Metals	Copper, metal	7440-50-8		0.013871	g	970000	97	8045	0.8045
Bonding Wire, Copper		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.000429	g	30000	3	248	0.0248
Organic Substrate	0.3714						g				
Organic Substrate		Solvents, additives, and other materials	Acrylonitrile/Butadiene copolymer, carboxyl terminated (26/74)	68891-46-3		0.00263545	g	7096	0.7096	1528	0.1528
Organic Substrate		Metals	Barium sulfate	7727-43-7		0.02445706	g	65851	6.5851	14185	1.4185
Organic Substrate		Metals	Copper, metal	7440-50-8		0.03030624	g	81600	8.16	17578	1.7578
Organic Substrate		Plastics/polymers	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3		0.00132107	g	3557	0.3557	766	0.0766
Organic Substrate		Plastics/polymers	4,4'-dihydroxy-3,3',5,5'-tetramethylbiphenyl digycidyl ether	85954-11-6		0.01402035	g	37750	3.775	8132	0.8132
Organic Substrate		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.13147153	g	353989	35.3989	76257	7.6257
Organic Substrate		Plastics/polymers	Proprietary Material-Other Epoxy resins	-		0.00228411	g	6150	0.615	1324	0.1324
Organic Substrate		Metals	Gold, metal	7440-57-5		0.00078217	g	2106	0.2106	453	0.0453
Organic Substrate		Solvents, additives, and other materials	Silicon	7440-21-3		0.00031643	g	852	0.0852	183	0.0183
Organic Substrate		Nickel (external applications only)	Nickel	7440-02-0		0.00793459	g	21364	2.1364	4602	0.4602
Organic Substrate		Glass	Fibrous-glass-wool	65997-17-3		0.12487916	g	336239	33.6239	72433	7.2433
Organic Substrate		Plastics/polymers	Other acrylic resins	-		0.01859488	g	50067	5.0067	10785	1.0785
Organic Substrate		Plastics/polymers	Other acrylic/epoxy resin mixture	-		0.01239696	g	33379	3.3379	7190	0.719

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

IPC1752 XML LINKS

http://www.freescale.com/mcds/MPC870ZT66_IPC1752_v11.xml

http://www.freescale.com/mcds/MPC870ZT66_IPC1752A.xml