PART INFORMATION

Mfg Item Number	P1010NXN5HFA
Mfg Item Name	TEPBGA 425 19*19*1.9 P.8

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-04-11
Response Document ID	008MK00073D052A1.34
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	Yes
HalogenFree	Yes
Plating Indicator	e2
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	P1010NXN5HFA
Mfg Item Name	TEPBGA 425 19*19*1.9 P.8
Version	ALL
Weight	0.989200
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	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%
Epoxy Die Attach	0.0023						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		0.00001944	g	8451	0.8451	19	0.0019
Epoxy Die Attach		Plastics/polymers	Phenolic Polymer Resin, Epikote 155	9003-36-5		0.00029803	g	129579	12.9579	301	0.0301
Epoxy Die Attach		Plastics/polymers	4,4'-Dihydroxydiphenyl	92-88-6		0.00001944	g	8451	0.8451	19	0.0019
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.00196309	g	853519	85.3519	1984	0.1984
Solder Balls - Pb Free, Sn/Ag	0.1093						g				
Solder Balls - Pb Free, Sn/Ag		Metals	Aluminum, metal	7429-90-5		0.0000035	g	32	0.0032	3	0.0003
Solder Balls - Pb Free, Sn/Ag		Antimony/Antimony Compounds	Antimony (metallic)	7440-36-0		0.00001366	g	125	0.0125	13	0.0013
Solder Balls - Pb Free, Sn/Ag		Arsenic/Arsenic Compounds	Arsenic	7440-38-2		0.0000082	g	75	0.0075	8	0.0008
Solder Balls - Pb Free, Sn/Ag		Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.00002055	g	188	0.0188	20	0.002
Solder Balls - Pb Free, Sn/Ag		Cadmium/Cadmium Compounds	Cadmium	7440-43-9		0.00000142	g	13	0.0013	1	0.0001
Solder Balls - Pb Free, Sn/Ag		Metals	Copper, metal	7440-50-8		0.00000689	g	63	0.0063	6	0.0006
Solder Balls - Pb Free, Sn/Ag		Metals	Gold, metal	7440-57-5		0.00000689	g	63	0.0063	6	0.0006
Solder Balls - Pb Free, Sn/Ag		Metals	Indium, metal	7440-74-6		0.00000689	g	63	0.0063	6	0.0006
Solder Balls - Pb Free, Sn/Ag		Solvents, additives, and other materials	Sulfur	7704-34-9		0.00000077	g	7	0.0007	0	0
Solder Balls - Pb Free, Sn/Ag		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00000689	g	63	0.0063	6	0.0006
Solder Balls - Pb Free, Sn/Ag		Metals	Iron, metal	7439-89-6		0.00001366	g	125	0.0125	13	0.0013
Solder Balls - Pb Free, Sn/Ag		Lead/Lead Compounds	Lead	7439-92-1		0.00003421	g	313	0.0313	34	0.0034
Solder Balls - Pb Free, Sn/Ag		Nickel (external applications only)	Nickel	7440-02-0		0.0000035	g	32	0.0032	3	0.0003
Solder Balls - Pb Free, Sn/Ag		Metals	Silver, metal	7440-22-4		0.00382572	g	35002	3.5002	3867	0.3867
Solder Balls - Pb Free, Sn/Ag		Metals	Tin, metal	7440-31-5		0.10534517	g	963817	96.3817	106495	10.6495
Solder Balls - Pb Free, Sn/Ag		Metals	Zinc, metal	7440-66-6		0.00000208	g	19	0.0019	2	0.0002
Die Encapsulant	0.4857						g				
Die Encapsulant		Plastics/polymers	Other Epoxy resins	-		0.029142	g	60000	6	29460	2.946
Die Encapsulant		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.004857	g	10000	1	4910	0.491
Die Encapsulant		Solvents, additives, and other materials	Other inorganic compounds.	-		0.009714	g	20000	2	9820	0.982
Die Encapsulant		Plastics/polymers	Other phenolic resins	-		0.024285	g	50000	5	24550	2.455
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.417702	g	860000	86	422285	42.2285
Organic Substrate, Halogen-fre	0.3605						g				
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Other acrylates	-		0.00456862	g	12673	1.2673	4618	0.4618
Organic Substrate, Halogen-fre		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.01975107	g	54788	5.4788	19966	1.9966
Organic Substrate, Halogen-fre		Metals	Barium	7440-39-3		0.00410646	g	11391	1.1391	4151	0.4151
Organic Substrate, Halogen-fre		Metals	Copper, metal	7440-50-8		0.23690077	g	657145	65.7145	239487	23.9487
Organic Substrate, Halogen-fre		Plastics/polymers	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3		0.00080968	g	2246	0.2246	818	0.0818
Organic Substrate, Halogen-fre		Metals	Gold, metal	7440-57-5		0.00052309	g	1451	0.1451	528	0.0528
Organic Substrate, Halogen-fre		Nickel (external applications only)	Nickel	7440-02-0		0.00433645	g	12029	1.2029	4383	0.4383
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Other organic Silicon Compounds	-		0.00012473	g	346	0.0346	126	0.0126
Organic Substrate, Halogen-fre		Glass	Fibrous-glass-wool	65997-17-3		0.04256027	g	118059	11.8059	43024	4.3024
Organic Substrate, Halogen-fre		Glass	Silicon dioxide	7631-86-9		0.02429662	g	67397	6.7397	24561	2.4561
Organic Substrate, Halogen-fre		Solvents, additives, and other materials	Proprietary Material-Other miscellaneous substances.	-		0.00448138	g	12431	1.2431	4530	0.453
Organic Substrate, Halogen-fre		Plastics/polymers	Other Non-halogenated Epoxy resins	-		0.01804086	g	50044	5.0044	18237	1.8237
Silicon Semiconductor Die	0.025						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.0005	g	20000	2	505	0.0505
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.0245	g	980000	98	24767	2.4767
Bonding Wire, PdCu	0.0064						g				
Bonding Wire, PdCu		Metals	Copper, metal	7440-50-8		0.00624864	g	976350	97.635	6316	0.6316
Bonding Wire, PdCu		Metals	Gold, metal	7440-57-5		0.00001085	g	1696	0.1696	10	0.001
Bonding Wire, PdCu		Metals	Palladium, metal	7440-05-3		0.00014051	g	21954	2.1954	142	0.0142

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/P1010NXN5HFA_IPC1752_v11.xml

http://www.freescale.com/mcds/P1010NXN5HFA_IPC1752A.xml