

PART INFORMATION		
Mfg Item Number	A3T18H455W23SR6	
Mfg Item Name	ACP-1230S-4L2S	
SUPPLIER		
Company Name	Freescale Semiconductor Inc	
Company Unique ID	14-141-7928	
Response Date	2017-12-22	
Response Document ID	00RGK06082D010A1.5	
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	e4	
EU RoHS Exemption(s)		
MANUFACTURING		
Mfg Item Number	A3T18H455W23SR6	
Mfg Item Name	ACP-1230S-4L2S	
Version	ALL	
Weight	6.261500	
UoM	g	
Unit Volume	EACH	
J-STD-020 MSL Rating		
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%
Bonding Wire, Aluminum	0.178						g					
Bonding Wire, Aluminum		Metals	Aluminum, metal	7429-90-5		0.178	g	1000000	100		28427	2.8427
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00007	g	20000	2		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00343	g	880000	98		547	0.0547
Cap/Cover	0.7156						g					
Cap/Cover		Solvents, additives, and other materials	1-cyanoguanidine	461-58-5		0.00100184	g	1400	0.14		160	0.016
Cap/Cover		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.00010018	g	140	0.014		15	0.0015
Cap/Cover		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00090166	g	1260	0.126		144	0.0144
Cap/Cover		Plastics/polymers	Proprietary Material-Other acrylic/epoxy resin mixture	-		0.7055816	g	986000	98.6		112685	11.2685
Cap/Cover		Metals	Titanium dioxide	1317-70-0		0.00050092	g	700	0.07		80	0.008
Cap/Cover		Plastics/polymers	Acrylonitrile-methyl-methacrylate-vinylidene chloride copolymer	25036-25-3		0.00300552	g	4200	0.42		480	0.048
Cap/Cover		Polymers	Bisphenol A, formaldehyde, epichlorohydrin polymer	28906-96-9		0.00400736	g	5600	0.56		640	0.064
Cap/Cover		Solvents, Additives, and Others	3,3'-(4-Methylbenzene-1,3-diyl)bis(1,1-dimethylurea)	17526-94-2		0.00050092	g	700	0.07		80	0.008
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.0000357	g	10200	1.02		5	0.0005
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00006929	g	19796	1.9796		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00339501	g	970004	97.0004		542	0.0542
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.0000357	g	10200	1.02		5	0.0005
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00006929	g	19796	1.9796		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00339501	g	970004	97.0004		542	0.0542
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00007	g	20000	2		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00343	g	980000	98		547	0.0547
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.0000357	g	10200	1.02		5	0.0005
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00006929	g	19796	1.9796		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00339501	g	970004	97.0004		542	0.0542
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00007	g	20000	2		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00343	g	980000	98		547	0.0547
Lead Frame Assembly	0.4257						g					
Lead Frame Assembly		Metals	Copper, metal	7440-50-8		0.27556581	g	647324	64.7324		44009	4.4009
Lead Frame Assembly		Solvents, additives, and other materials	1-cyanoguanidine	461-58-5		0.00080883	g	1900	0.19		129	0.0129
Lead Frame Assembly		Solvents, additives, and other materials	Silicon	7440-21-3		0.00216725	g	5138	0.5138		349	0.0349
Lead Frame Assembly		Metals	Iron, metal	7439-89-6		0.00058321	g	1370	0.137		93	0.0093
Lead Frame Assembly		Lead/Lead Compounds	Lead	7439-92-1		0.00014602	g	343	0.0343		23	0.0023
Lead Frame Assembly		Metals	Magnesium, metal	7439-95-4		0.00043762	g	1028	0.1028		69	0.0069
Lead Frame Assembly		Metals	Manganese, metal	7439-96-5		0.00043762	g	1028	0.1028		69	0.0069
Lead Frame Assembly		Nickel (external applications only)	Nickel	7440-02-0		0.00933134	g	21920	2.192		1490	0.149
Lead Frame Assembly		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.00008088	g	190	0.019		12	0.0012
Lead Frame Assembly		Metals	Zinc, metal	7440-66-6		0.00291605	g	6850	0.685		465	0.0465
Lead Frame Assembly		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00072795	g	1710	0.171		116	0.0116
Lead Frame Assembly		Plastics/polymers	Proprietary Material-Other acrylic/epoxy resin mixture	-		0.1260677	g	295999	29.5999		20124	2.0124
Lead Frame Assembly		Metals	Titanium dioxide	1317-70-0		0.00040442	g	950	0.095		64	0.0064
Lead Frame Assembly		Plastics/polymers	Acrylonitrile-methyl-methacrylate-vinylidene chloride copolymer	25036-25-3		0.00242649	g	5700	0.57		387	0.0387
Lead Frame Assembly		Polymers	Bisphenol A, formaldehyde, epichlorohydrin polymer	28906-96-9		0.00323532	g	7600	0.76		516	0.0516
Lead Frame Assembly		Solvents, Additives, and Others	3,3'-(4-Methylbenzene-1,3-diyl)bis(1,1-dimethylurea)	17526-94-2		0.00040442	g	950	0.095		64	0.0064
Silicon Semiconductor Die	0.0035						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.0000357	g	10200	1.02		5	0.0005
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00006929	g	19796	1.9796		11	0.0011
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.00339501	g	970004	97.0004		542	0.0542
Heat Sink	4.9177						g					
Heat Sink		Metals	Cobalt, metal	7440-48-4		0.0221149	g	4497	0.4497		3531	0.3531
Heat Sink		Metals	Copper, metal	7440-50-8		4.831296	g	982430	98.243		771607	77.1607
Heat Sink		Metals	Gold, metal	7440-57-5		0.02038387	g	4145	0.4145		3255	0.3255
Heat Sink		Nickel (external applications only)	Nickel	7440-02-0		0.03911047	g	7953	0.7953		6246	0.6246
Heat Sink		Metals	Zirconium, metal	7440-67-7		0.00479476	g	975	0.0975		765	0.0765

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/A3T18H455W23SR6_IPC1752_v11.xml

http://www.freescale.com/mcds/A3T18H455W23SR6_IPC1752A.xml