

**PART INFORMATION**

Mfg Item Number	A3T18H400W23SR6
Mfg Item Name	ACP-1230S-4L2S

**SUPPLIER**

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2017-10-19
Response Document ID	00RGK06082D007A1.0
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	A3T18H400W23SR6
Mfg Item Name	ACP-1230S-4L2S
Version	ALL
Weight	6.035200
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	<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, Aluminum	0.178						g				
Bonding Wire, Aluminum		Metals	Aluminum, metal	7429-90-5		0.178	g	1000000	100	29493	2.9493
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	568	0.0568
Cap/Cover	0.7156						g				
Cap/Cover		Solvents, additives, and other materials	1-cyanoguanidine	461-58-5		0.00100184	g	1400	0.14	165	0.0165
Cap/Cover		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.00010018	g	140	0.014	16	0.0016
Cap/Cover		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00090166	g	1260	0.126	149	0.0149
Cap/Cover		Plastics/polymers	Proprietary Material-Other acrylic/epoxy resin mixture	-		0.7055816	g	986000	98.6	116911	11.6911
Cap/Cover		Metals	Titanium dioxide	1317-70-0		0.00050092	g	700	0.07	82	0.0082
Cap/Cover		Plastics/polymers	Acrylonitrile-methyl-methacrylate-vinylidene chloride copolymer	25036-25-3		0.00300552	g	4200	0.42	497	0.0497
Cap/Cover		Polymers	Bisphenol A, formaldehyde, epichlorohydrin polymer	28906-96-9		0.00400736	g	5600	0.56	583	0.0583
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	82	0.0082
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	562	0.0562
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	568	0.0568
Heat Sink	4.6914						g				
Heat Sink		Metals	Cobalt, metal	7440-48-4		0.02109723	g	4497	0.4497	3495	0.3495
Heat Sink		Metals	Copper, metal	7440-50-8		4.6089721	g	982430	98.243	763706	76.3706
Heat Sink		Metals	Gold, metal	7440-57-5		0.01944585	g	4145	0.4145	3222	0.3222
Heat Sink		Nickel (external applications only)	Nickel	7440-02-0		0.0373107	g	7953	0.7953	6182	0.6182
Heat Sink		Metals	Zirconium, metal	7440-67-7		0.00457412	g	975	0.0975	757	0.0757
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	562	0.0562
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	568	0.0568
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	562	0.0562
Lead Frame Assembly	0.4257						g				
Lead Frame Assembly		Metals	Copper, metal	7440-50-8		0.27565651	g	647324	64.7324	45659	4.5659
Lead Frame Assembly		Solvents, additives, and other materials	1-cyanoguanidine	461-58-5		0.00008983	g	1900	0.19	134	0.0134
Lead Frame Assembly		Silicon	Silicon	7440-21-3		0.00218725	g	5138	0.5138	362	0.0362
Lead Frame Assembly		Metals	Iron, metal	7439-89-6		0.00058321	g	1370	0.137	96	0.0096
Lead Frame Assembly		Lead/Lead Compounds	Lead	7439-92-1		0.0014602	g	343	0.0343	24	0.0024
Lead Frame Assembly		Metals	Magnesium, metal	7439-95-4		0.00043762	g	1028	0.1028	72	0.0072
Lead Frame Assembly		Metals	Manganese, metal	7439-96-5		0.00043762	g	1028	0.1028	72	0.0072
Lead Frame Assembly		Nickel (external applications only)	Nickel	7440-02-0		0.00933134	g	21920	2.192	1546	0.1546
Lead Frame Assembly		Solvents, additives, and other materials	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.00008088	g	190	0.019	13	0.0013
Lead Frame Assembly		Metals	Zinc, metal	7440-66-6		0.00291605	g	6850	0.685	483	0.0483
Lead Frame Assembly		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00072795	g	1710	0.171	120	0.012
Lead Frame Assembly		Plastics/polymers	Proprietary Material-Other acrylic/epoxy resin mixture	-		0.1260677	g	295999	29.5999	20878	2.0878
Lead Frame Assembly		Metals	Titanium dioxide	1317-70-0		0.00040442	g	950	0.095	67	0.0067
Lead Frame Assembly		Plastics/polymers	Acrylonitrile-methyl-methacrylate-vinylidene chloride copolymer	25036-25-3		0.00242649	g	6700	0.57	402	0.0402
Lead Frame Assembly		Polymers	Bisphenol A, formaldehyde, epichlorohydrin polymer	28906-96-9		0.00323532	g	7600	0.76	536	0.0536
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	67	0.0067
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	562	0.0562

## LINKS

MCD LINK	
NXP website	<a href="http://www.nxp.com">http://www.nxp.com</a>
GENERAL ENVIRONMENTAL COMPLIANCE LINKS	
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>
NXP ENVIRONMENTAL INFORMATION	
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/mcdfs/A3T18H400W23SR6\\_IPC1752\\_v11.xml](http://www.freescale.com/mcdfs/A3T18H400W23SR6_IPC1752_v11.xml)

[http://www.freescale.com/mcdfs/A3T18H400W23SR6\\_IPC1752A.xml](http://www.freescale.com/mcdfs/A3T18H400W23SR6_IPC1752A.xml)