

PART INFORMATION

Mfg Item Number	A2T23H160-24SR3
Mfg Item Name	NI-780S-4L2L

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2018-05-15
Response Document ID	00HMK04627D002A1.3
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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Authorized Representative	Daniel Binyon
Representative Title	EPP Customer Response
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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	A2T23H160-24SR3
Mfg Item Name	NI-780S-4L2L
Version	ALL
Weight	4.671800
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	0.0195						g				
Bonding Wire, Aluminum		Metals	Aluminum, metal	7429-90-5		0.0195	g	1000000	100	4173	0.4173
Header Assembly	3.5894						g				
Header Assembly		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.23700449	g	66029	6.6029	50730	5.073
Header Assembly		Metals	Cobalt, metal	7440-48-4		0.01384073	g	3856	0.3856	2962	0.2962
Header Assembly		Metals	Copper, metal	7440-50-8		1.56384774	g	435685	43.5685	334759	33.4759
Header Assembly		Metals	Gold, metal	7440-57-5		0.00476672	g	1328	0.1328	1020	0.102
Header Assembly		Metals	Iron, metal	7439-89-6		0.10227636	g	28494	2.8494	21892	2.1892
Header Assembly		Metals	Molybdenum, metal	7439-98-7		1.44572417	g	402776	40.2776	309457	30.9457
Header Assembly		Nickel (external applications only)	Nickel	7440-02-0		0.10627496	g	29608	2.9608	22748	2.2748
Header Assembly		Metals	Palladium, metal	7440-05-3		0.00276743	g	771	0.0771	592	0.0592
Header Assembly		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.00830587	g	2314	0.2314	1777	0.1777
Header Assembly		Glass	Proprietary Material-Other glass compounds (without lead, strontium, cadmium or mercury)	-		0.01784291	g	4971	0.4971	3819	0.3819
Header Assembly		Metals	Silver, metal	7440-22-4		0.03122778	g	8790	0.87	6884	0.6884
Header Assembly		Metals	Titanium (IV) Oxide	13463-67-7		0.00153626	g	428	0.0428	329	0.0329
Header Assembly		Metals	Tungsten, metal	7440-33-7		0.05398458	g	15040	1.504	11556	1.1556
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000406	g	20000	2	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.019894	g	980000	98	4258	0.4258
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.000406	g	20000	2	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.019894	g	980000	98	4258	0.4258
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00020796	g	10200	1.02	44	0.0044
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00040186	g	19796	1.9796	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.01989108	g	970004	97.0004	4214	0.4214
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00020796	g	10200	1.02	44	0.0044
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00040186	g	19796	1.9796	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.01989108	g	970004	97.0004	4214	0.4214
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00020796	g	10200	1.02	44	0.0044
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00040186	g	19796	1.9796	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.01989108	g	970004	97.0004	4214	0.4214
Cap/Cover	0.9411						g				
Cap/Cover		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.88459824	g	939962	93.9962	185348	18.5348
Cap/Cover		Plastics/polymers	Epoxy resin, EPON Resin 8091	25928-94-3		0.01036998	g	11019	1.1019	2219	0.2219
Cap/Cover		Metals	Other iron compounds	-		0.00943923	g	10030	1.003	2020	0.202
Cap/Cover		Glass	Silicon dioxide	7631-86-9		0.00850849	g	9041	0.9041	1821	0.1821
Cap/Cover		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.02818406	g	29948	2.9948	6032	0.6032
Silicon Semiconductor Die	0.0203						g				
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00020796	g	10200	1.02	44	0.0044
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%)	-		0.00040186	g	19796	1.9796	86	0.0086
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.01989108	g	970004	97.0004	4214	0.4214

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/mcdfs/A2T23H160-24SR3_IPC1752_v11.xml

http://www.freescale.com/mcdfs/A2T23H160-24SR3_IPC1752A.xml