

PART INFORMATION		
Mfg Item Number		A2T18S160W31GSR3
Mfg Item Name		NI-780GS-2L2LA
SUPPLIER		
Company Name		Freescale Semiconductor Inc
Company Unique ID		14-141-7928
Response Date		2018-04-05
Response Document ID		00LGK02463D014A1.2
Contact Name		Freescale Semiconductor Inc
Contact Title		Product Technical Support
Contact Phone		1-800-521-6274
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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		A2T18S160W31GSR3
Mfg Item Name		NI-780GS-2L2LA
Version		ALL
Weight		4.159500
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	0.0198						g					
Bonding Wire, Aluminum		Metals	Aluminum, metal	7429-90-5		0.0198	g	1000000	100		4760	0.476
Silicon Semiconductor Die	0.0767						g					
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.001534	g	20000	2		368	0.0368
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.075166	g	980000	98		18070	1.807
Silicon Semiconductor Die	0.0767						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00078234	g	10200	1.02		188	0.0188
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00151835	g	19796	1.9796		365	0.0365
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.07439931	g	970004	97.0004		17886	1.7886
Capacitor, 0201	0.164						g					
Capacitor, 0201		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.00509433	g	31063	3.1063		1224	0.1224
Capacitor, 0201		Metals	Copper, metal	7440-50-8		0.01011552	g	61680	6.168		2431	0.2431
Capacitor, 0201		Metals	Gold, metal	7440-57-5		0.01052027	g	64148	6.4148		2529	0.2529
Capacitor, 0201		Metals	Manganese dioxide	1313-13-9		0.0001658	g	1011	0.1011		39	0.0039
Capacitor, 0201		Nickel (external applications only)	Nickel	7440-02-0		0.00546251	g	33308	3.3308		1313	0.1313
Capacitor, 0201		Metals	Tin, metal	7440-31-5		0.00161852	g	9869	0.9869		389	0.0389
Capacitor, 0201		Metals	Barium titanate	12047-27-7		0.13102305	g	798921	79.8921		31499	3.1499
Header Assembly	2.7507						g					
Header Assembly		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.1772166	g	64426	6.4426		42605	4.2605
Header Assembly		Metals	Cobalt, metal	7440-48-4		0.01389654	g	5052	0.5052		3340	0.334
Header Assembly		Metals	Copper, metal	7440-50-8		1.16919329	g	425053	42.5053		281107	28.1107
Header Assembly		Metals	Gold, metal	7440-57-5		0.00528409	g	1921	0.1921		1270	0.127
Header Assembly		Metals	Iron, metal	7439-89-6		0.10543433	g	38330	3.833		25347	2.5347
Header Assembly		Metals	Molybdenum, metal	7439-98-7		1.07960574	g	392484	39.2484		259551	25.9551
Header Assembly		Nickel (external applications only)	Nickel	7440-02-0		0.10887821	g	39582	3.9582		26175	2.6175
Header Assembly		Metals	Palladium, metal	7440-05-3		0.00252789	g	919	0.0919		607	0.0607
Header Assembly		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.00620283	g	2255	0.2255		1491	0.1491
Header Assembly		Glass	Proprietary Material-Other glass compounds (without lead, chromium, cadmium or mercury)	-		0.01332439	g	4844	0.4844		3203	0.3203
Header Assembly		Metals	Silver, metal	7440-22-4		0.02686884	g	9768	0.9768		6459	0.6459
Header Assembly		Metals	Titanium (IV) Oxide	13463-67-7		0.00114979	g	418	0.0418		276	0.0276
Header Assembly		Metals	Tungsten, metal	7440-33-7		0.04111746	g	14948	1.4948		9885	0.9885
Silicon Semiconductor Die	0.0767						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00078234	g	10200	1.02		188	0.0188
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00151835	g	19796	1.9796		365	0.0365
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.07439931	g	970004	97.0004		17886	1.7886
Silicon Semiconductor Die	0.0767						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00078234	g	10200	1.02		188	0.0188
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00151835	g	19796	1.9796		365	0.0365
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.07439931	g	970004	97.0004		17886	1.7886
Cap/Cover	0.9182						g					
Cap/Cover		Metals	Aluminum Oxides (Al2O3)	1344-28-1		0.8630731	g	939962	93.9962		207494	20.7494
Cap/Cover		Plastics/polymers	Epoxy resin, EPON Resin 8091	25928-94-3		0.01011765	g	11019	1.1019		2432	0.2432
Cap/Cover		Metals	Other iron compounds	-		0.00920955	g	10030	1.003		2214	0.2214
Cap/Cover		Glass	Silicon dioxide	7631-86-9		0.00830145	g	9041	0.9041		1995	0.1995
Cap/Cover		Glass	Silica, crystalline - quartz (SiO2)	14808-60-7		0.02748825	g	29948	2.9948		6610	0.661

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/A2T18S160W31GSR3_IPC1752_v11.xml

http://www.freescale.com/mcds/A2T18S160W31GSR3_IPC1752A.xml