PART INFORMATION

Mfg Item Number	AFIC901NT1
Mfg Item Name	QFN 4X4X0.85 24 I/O, SAW

SUPPLIER

Company Name	Freescale Semiconductor Inc
Company Unique ID	14-141-7928
Response Date	2016-12-12
Response Document ID	00MHA1.2
Contact Name	Freescale Semiconductor Inc
Contact Title	Product Technical Support
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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	e3
EU RoHS Exemption(s)	

MANUFACTURING

Mfg Item Number	AFIC901NT1
Mfg Item Name	QFN 4X4X0.85 24 I/O, SAW
Version	ALL
Weight	0.046500
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%
Lead Frame Plating	0.0008						g					
Lead Frame Plating		Lead/Lead Compounds	Lead	7439-92-1		0.00000016	g	200	0.02		3	0.0003
Lead Frame Plating		Metals	Tin, metal	7440-31-5		0.00079984	g	999800	99.98		17200	1.72
Epoxy Die Attach	0.0003						g					
Epoxy Die Attach		Cadmium/Cadmium Compounds	Cadmium	7440-43-9		0	g	5	0.0005		0	0
Epoxy Die Attach		Lead/Lead Compounds	Lead	7439-92-1		0.00000003	g	112	0.0112		0	0
Epoxy Die Attach		Plastics/polymers	4,4'-Dihydroxydiphenyl	92-88-6		0.00000353	g	11771	1.1771		75	0.0075
Epoxy Die Attach		Plastics/polymers	Phenol, polymer with formaldehyde	9003-35-4		0.00002119	g	70628	7.0628		455	0.0455
Epoxy Die Attach		Plastics/polymers	Phenol p-xylylene dimethyl ether copolymer	26834-02-6		0.00000353	g	11771	1.1771		75	0.0075
Epoxy Die Attach		Metals	Silver, metal	7440-22-4		0.00027172	g	905713	90.5713		5843	0.5843
Bonding Wire, Other	0.0004						g					
Bonding Wire, Other		Metals	Gold, metal	7440-57-5		0.000396	g	990000	99		8516	0.8516
Bonding Wire, Other		Metals	Palladium, metal	7440-05-3		0.000004	g	10000	1		86	0.0086
Die Encapsulant	0.0208						g					
Die Encapsulant		Metals	Other bismuth compounds	-		0.000208	g	10000	1		4473	0.4473
Die Encapsulant		Solvents, additives, and other materials	Carbon Black	1333-86-4		0.000208	g	10000	1		4473	0.4473
Die Encapsulant		Plastics/polymers	Other phenolic resins	-		0.000832	g	40000	4		17892	1.7892
Die Encapsulant		Glass	Silica, vitreous	60676-86-0		0.018096	g	870000	87		389161	38.9161
Die Encapsulant		Plastics/polymers	Other Non-halogenated Epoxy resins	-		0.001456	g	70000	7		31311	3.1311
Copper Lead Frame	0.0235						g					
Copper Lead Frame		Metals	Copper, metal	7440-50-8		0.02210923	g	940818	94.0818		475477	47.5477
Copper Lead Frame		Solvents, additives, and other materials	Phosphorus, elemental (not containing red allotrope)	7723-14-0		0.00000625	g	266	0.0266		134	0.0134
Copper Lead Frame		Metals	Iron, metal	7439-89-6		0.00053232	g	22652	2.2652		11447	1.1447
Copper Lead Frame		Metals	Silver, metal	7440-22-4		0.00082473	g	35095	3.5095		17736	1.7736
Copper Lead Frame		Metals	Zinc, metal	7440-66-6		0.00002747	g	1169	0.1169		590	0.059
Silicon Semiconductor Die	0.0007						g					
Silicon Semiconductor Die		Metals	Gold, metal	7440-57-5		0.00000714	g	10200	1.02		153	0.0153
Silicon Semiconductor Die		Solvents, additives, and other materials	Other miscellaneous substances (less than 5%).	-		0.00001386	g	19796	1.9796		298	0.0298
Silicon Semiconductor Die		Glass	Silicon, doped	-		0.000679	g	970004	97.0004		14602	1.4602

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/AFIC901NT1_IPC1752_v11.xml

http://www.freescale.com/mcds/AFIC901NT1_IPC1752A.xml