



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-01-09
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giovanni Giacopello	Representative Title	AMS & IPD Materials Declaration Champion
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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Legal Statement

Supplier certifies that it gathered the provided information and 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. 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 Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	7TUI*AHC108C	A	SH1A	2015-01-09
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,16.25,4,5	3	Through-hole	
Comment	Package: TO 220 ISOL FULL PACK 0.5 AB; MDF valid for ACST1235-8FP			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices

QueryList : REACH-16th June 2014				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	7TUI* AHC108C					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	5.653	mg	supplier	die	Silicon (Si)	7440-21-3		4.883	mg	863789	2570
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.163	mg	28834	86
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.093	mg	16451	49
die (s)				supplier	passivation	Alumina	1344-28-1		0.046	mg	8137	24
die (s)				JIG - R	passivation	Lead silicate Glass	65997-18-4	7c-I-Electrical and e	0.41	mg	72528	216
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	531	2
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.01	mg	1769	5
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.045	mg	7960	24
Leadframe	Copper & its alloys	609.924	mg	supplier	alloy	Copper (Cu)	7440-50-8		600.272	mg	984175	315933
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.276	mg	453	145
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.505	mg	828	266
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		8.816	mg	14454	4640
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.055	mg	90	29
Soft solder	Solder	3.376	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.224	mg	954976	1697
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.084	mg	24882	44
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.068	mg	20142	36
Bonding wire	Other inorganic materials	1.359	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.359	mg	1000000	715
encapsulation	Other Organic Materials	1273.822	mg	supplier	mold compound	Silica, vitreous	60676-86-0		95.537	mg	75000	50283
encapsulation				supplier	mold compound	Quartz	14808-60-7		891.675	mg	700000	469303
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		178.335	mg	140000	93861
encapsulation				supplier	mold compound	phenol resin	Proprietary		89.168	mg	70000	46931
encapsulation				supplier	mold compound	carbon black	1333-86-4		6.369	mg	5000	3352
encapsulation				supplier	mold compound	metal hydroxide	Proprietary		12.738	mg	10000	6704
connections coating	Solder	5.866	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.866	mg	1000000	3087