



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D
<i>* : Required Field</i>			


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-04-12
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
ACS102-6TA-TR	ETTK*A2F102C	A	Z4XA	2016-04-12
Amount		UoM	Unit type	ST ECOPACK Grade
220.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
RAD	4.6X4.6X3.5	3	Through-hole	
Comment	Package: TO 92 Soft Solder			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - 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)

QueryList : REACH-17th December 2015				
Query				Response
1 - Product(s) 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	ETTK*A2F102C					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	1.693	mg	supplier	die	Silicon (Si)	7440-21-3		1.419	mg	838157	6450
				supplier	metallization	Aluminium (Al)	7429-90-5		0.218	mg	128766	991
				supplier	Passivation	Silicon Oxide	7631-86-9		0.018	mg	10632	82
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	591	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1772	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	7679	59
				supplier	polymer die coating	Propimide	proprietary		0.021	mg	12404	95
				supplier	alloy	Copper (Cu)	7440-50-8		100.341	mg	999014	456095
Leadframe	Copper & its alloys	100.440	mg	supplier	alloy	Phosphorus(P)	12185-10-3		0.030	mg	299	136
				supplier	alloy	Iron(Fe)	7439-89-6		0.069	mg	687	314
				supplier	solder	Silver(Ag)	7440-22-4		0.021	mg	14904	95
Die attach	Solder	1.409	mg	R	solder	Lead(Pb)	7439-92-01	7a-Lead in high me	1.317	mg	934705	5986
				supplier	solder	Tin(Sn)	7440-31-5		0.071	mg	50390	323
Bonding wire	Other inorganic materials	1.378	mg	supplier	Bonding wire	Copper(Cu)	7440-50-8		1.378	mg	1000000	6264
				supplier	Mold compound	Silicone dioxide (Quartz)	14808-60-7		95.753	mg	849997	435241
Encapsulation	Other Organic Materials	112.651	mg	supplier	Mold compound	Epoxy Resin	Proprietary		11.265	mg	99999	51205
				supplier	Mold compound	Phenol Resin	Proprietary		5.069	mg	44997	23041
				supplier	Mold compound	Carbon Black	1333-86-4		0.564	mg	5007	2564
				supplier	Connection coating	Tin(Sn)	7440-31-5		2.429	mg	1000000	11041
Finishing	Solder	2.429	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		2.429	mg	1000000	11041