



## 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>	2016-04-20
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	ADG 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

**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
STTH102AY	BNSR*C94F8AF	A	ZA41	2016-04-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	70.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	4.3 x 2.77 x 2	2	J bend	
Comment	Package: SMA			

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	BNSR* C94F8AF		Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
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	1.103	mg	supplier	die	Silicon (Si)	7440-21-3		0.939	mg	851315	13414
				supplier	metallization	Aluminium (Al)	7429-90-5		0.039	mg	35358	557
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	906	14
				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	3626	57
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	5440	86
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	907	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.006	mg	5440	86
				supplier	polymer die coating	Probimide	proprietary		0.107	mg	97008	1529
Leadframe	Copper and its alloy	26.760	mg	supplier	alloy	Copper (Cu)	7440-50-8		26.747	mg	999514	382100
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	38	14
				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	112	43
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.009	mg	336	129
Soft solder	Solder	2.834	mg	supplier	solder	Silver (Ag)	7440-22-4		0.071	mg	25053	1014
				supplier	solder	Tin (Sn)	7440-31-5		0.142	mg	50106	2029
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.621	mg	924841	37443
Encapsulation	Other inorganic materials	38.666	mg	supplier	mold compound	Amorphous Silica	7631-86-9		23.827	mg	616226	340386
				supplier	mold compound	Quartz	14808-60-7		7.732	mg	199969	110457
					mold compound	epoxy resin	25068-38-6		4.640	mg	120002	66286
				supplier	mold compound	phenolic resin	9003-35-4		2.320	mg	60001	33143
				supplier	mold compound	Bismuth trioxide	1304-76-3		0.027	mg	698	386
				supplier	mold compound	chlorine residue	7782-50-5		0.004	mg	104	57
Connections coating	Solder	0.637	mg	supplier	mold compound	Carbon black	1333-86-4		0.116	mg	3000	1657
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.637	mg	1000000	9100