



## 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  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2013-05-03
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMS/IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
STRVS248X02C	8HZH*TWU201K	A	BO2A	2013-05-03
Amount	UoM	Unit type	ECOPACK2/RoHS	
250.00	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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMC	6.69,5.63,2.38	1	J bend	
Comment	SMC CLIP (SOD 15)			

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)

QueryList :REACH-19 Dec 2012			
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	8ZH*TWU201K					
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	5.027	mg	supplier	die	Silicon (Si)	7440-21-3		4.909	mg	976527	19636
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	5570	112
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.019	mg	3780	76
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.014	mg	2785	56
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.019	mg	3780	76
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1392	28
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.031	mg	6167	124
Leadframe	Copper & its alloys	104.694	mg	supplier	alloy	Copper (Cu)	7440-50-8		103.738	mg	990869	414952
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.104	mg	993	416
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.031	mg	296	124
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.821	mg	7842	3284
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.004	mg	1000000	16
Soft solder	Solder	3.892	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.639	mg	934995	14556
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.058	mg	14902	232
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.195	mg	50103	780
Bonding wire	Other inorganic materials	39.514	mg	supplier	wire	Copper (Cu)	7440-50-8		39.514	mg	1000000	158056
encapsulation	Other organic materials	96.128	mg	JIG Table B	mold compound	Silica, vitreous	60676-86-0		73.058	mg	760007	292232
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.768	mg	60003	23072
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.769	mg	8000	3076
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		9.805	mg	101999	39220
encapsulation				supplier	mold compound	Metal hydroxide	na		1.922	mg	19994	7688
encapsulation				supplier	mold compound	Others	na		4.806	mg	49996	19224
connections coating	Solder	0.741	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.741	mg	1000000	2964