



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2015-01-13</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
	8HZH*TWU028M	A	BO2A	2015-01-13
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	Package: SMC CLIP (SOD 15); MD valid for CP: STIEC45-24AS.			

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-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	8ZH*TWU028M					
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	9.276	mg	supplier	die	Silicon (Si)	7440-21-3		9.059	mg	976606	36236
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.052	mg	5606	208
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.035	mg	3773	140
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.025	mg	2695	100
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.035	mg	3773	140
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1294	48
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.058	mg	6253	232
Leadframe	Copper & its alloys	104.677	mg	supplier	alloy	Copper (Cu)	7440-50-8		103.717	mg	990829	414868
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.104	mg	994	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	7843	3284
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.004	mg	38	16
Soft solder	Solder	6.415	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	5.998	mg	934996	23992
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.096	mg	14965	384
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.321	mg	50039	1284
Clips	Other inorganic materials	39.514	mg	supplier	Clips	Copper (Cu)	7440-50-8		39.514	mg	1000000	158056
encapsulation	Other organic materials	89.377	mg	supplier	mold compound	Silica, vitreous	60676-86-0		67.927	mg	760005	271708
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.363	mg	60004	21452
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.715	mg	8000	2860
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		9.116	mg	101995	36464
encapsulation				supplier	mold compound	Metal hydroxide	Proprietary		1.787	mg	19994	7148
encapsulation				supplier	mold compound	Others	Proprietary		4.469	mg	50002	17876
connections coating	Solder	0.741	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.741	mg	1000000	2964