



## 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>01/27/2015</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>	GIUSEPPE VITALI PALMA	<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
	AHZH*TYU019M	A	BO2A	01/27/2015
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		
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	6.69X5.63X2.38	1	J bend	
Comment	PACKAGE: SMC CLIP (SOD 15); MD valid for SM30T19AY			

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	AHZH*TYU019M					
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	9.264	mg	supplier	die	Silicon (Si)	7440-21-3		9.059	mg	977871	36236
die(s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.052	mg	5613	208
die(s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.035	mg	3778	140
die(s)				supplier	metallization	Gold (Au)	7440-57-5		0.013	mg	1403	52
die(s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.035	mg	3778	140
die(s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.012	mg	1295	48
die(s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.058	mg	6261	232
Leadframe	Copper and its alloys	103.228	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		103.094	mg	998702	412376
Leadframe				supplier	Leadframe	Iron (Fe)	7439-89-6		0.103	mg	998	412
Leadframe				supplier	Leadframe	Iron Phosphide (Fe2P)	1310-43-6		0.031	mg	300	124
Die attach	Other organic materials	6.415	mg	JIG R	Solder paste	Lead (Pb)	7439-92-1	7a-Lead in high me	5.998	mg	934996	23992
Die attach				supplier	Solder paste	Silver (Ag)	7440-22-4		0.096	mg	14965	384
Die attach				supplier	Solder paste	Tin (Sn)	7440-31-5		0.321	mg	50039	1284
Frame clip	Other inorganic materials	39.514	mg	supplier	Frame clip	Copper (Cu)	7440-50-8		39.514	mg	1000000	158056
encapsulation		90.838	mg	JIG Table B	mold compound	Silica, vitreous	60676-86-0		69.037	mg	760001	276148
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.45	mg	59997	21800
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.727	mg	8003	2908
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		9.265	mg	101995	37060
encapsulation				supplier	mold compound	Metal hydroxide	Proprietary		1.817	mg	20003	7268
encapsulation				supplier	mold compound	Others	Proprietary		4.542	mg	50001	18168
connections coating	Other inorganic materials	0.741	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.741	mg	1000000	2964