



## 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>	11/28/2014
<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>	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
	HNZK*G38B81B	A	ZA41	11/28/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
107.000	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	6.88X5.97X2.15	1	J bend	
Comment	Package: SMC CLIP (SOD 15 NEW); MD for product STTH3R06S			

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	HNZK*G3881B					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon die	Other inorganic material	1.734	mg	Supplier	Silicon Die	silicon	7440-21-3		1.670	mg	963091	15607
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.017	mg	9804	159
Silicon die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	2307	37
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.029	mg	16724	271
Silicon die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	577	9
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1153	19
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.011	mg	6344	103
Die attach	Other organic material	4.2	mg	Supplier	soft solder	Ag	7440-22-4		0.105	mg	25000	981
Die attach				Supplier	soft solder	Sn	7440-31-5		0.210	mg	50000	1963
Die attach				JIG R	soft solder	Pb	7439-92-1	7a-Lead in high me	3.885	mg	925000	36308
Leadframe and Clip	Copper and its alloy	39.936	mg	Supplier	Alloy	Cu	7440-50-8		39.916	mg	999512	373047
Leadframe and Clip				Supplier	Alloy	Zn	7440-66-6		0.002	mg	45	17
Leadframe and Clip				Supplier	Alloy	Fe	7439-89-6		0.004	mg	102	38
Leadframe and Clip				Supplier	Alloy	Iron Phosphide (Fe2P)	1310-43-6		0.014	mg	341	127
Encapsulation	Other organic material	60.06	mg	Supplier	Molding Compound	silica fused	7631-86-9		41.742	mg	695000	390109
Encapsulation				Supplier	Molding Compound	silica quartz	14808-60-7		13.213	mg	220000	123488
Encapsulation				Supplier	Molding Compound	phenolic resin	9003-35-4		4.805	mg	80000	44905
Encapsulation				Supplier	Molding Compound	carbon black	1333-86-4		0.300	mg	5000	2807
Finishing	Other inorganic material	1.07	mg	Supplier	connection coating	Sn	7440-31-5		1.070	mg	1000000	10000