



## 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>	2014-06-06
<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>	Giovanni Giacopello	<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

**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
	C107*EL3EB6F	A	Z8GA	2014-06-06
Amount	UoM	Unit type	ST ECOPACK Grade	
80.00	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		
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
DSO	4.85X3.9X1.52	8	gull wing
Comment	Package:SO 08 .15 JEDEC; MDF valid for STS11NF30L		

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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)	false
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

QueryList : REACH-16th December 2013				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	C107*EL3EB6F					
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 materials	5.806	mg	supplier	die	Silicon (Si)	7440-21-3		5.687	mg	979504	71088
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.038	mg	6545	475
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	1378	100
Die Attach				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.024	mg	4134	300
Die Attach				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	517	38
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	1378	100
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.038	mg	6545	475
Leadframe	Copper & its alloys	30.12	mg	supplier	alloy	Copper(CU)	7440-50-8		29.125	mg	19159	12
Leadframe				supplier	alloy	Iron(Fe)	7439-89-6		0.703	mg	1545	1
Leadframe				supplier	alloy	Iron Phosphide(FeP)	26508-33-8		0.025	mg	7726	5
Leadframe				supplier	alloy	Zinc(Zn)	7440-66-6		0.038	mg	994375	465487
Leadframe				supplier	metallization	Silver(Ag)	7440-22-4		0.229	mg	1062	497
Die attach	Other inorganic materials	0.314	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.274	mg	4245	1987
Die attach				supplier	glue or tape	Bismaleimide resin	Proprietary		0.019	mg	318	149
Die attach				supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.019	mg	935037	3482
Die attach				supplier	glue or tape	polymer	Proprietary		0.002	mg	14975	56
Bonding wire	Other inorganic materials	0.076	mg	supplier	wire	Copper(CU)	7440-50-8		0.076	mg	49987	186
encapsulation	Other inorganic materials	40.03	mg	supplier	mold compound	Epoxy Resin	Proprietary		3.003	mg	1000000	382
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		2.002	mg	756667	420037
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		34.665	mg	127827	70959
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.2	mg	71015	39422
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.16	mg	20290	11263
connections coating	Solder	3.654	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.654	mg	20142	11181