



## 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>	2014-02-14
<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

**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
	FZWX*46VBCR3	A	Z6FA	2014-02-14
Amount	UoM	Unit type	ST ECOPACK Grade	
9.013	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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	2.8X1.5X0.9	3	gull wing	
Comment	Package: SOT 23 3 LDS			

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)	<b>false</b>
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	<b>false</b>
Product(s) does not meet EU RoHS requirements and is not under exemptions	<b>false</b>
Product(s) is obsolete, no information is available	<b>false</b>
Product(s) is unknown, no information is available	<b>false</b>
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	FZWX*46VBCR3					
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	5.183	mg	supplier	Silicon die	Silicon	7440-21-3		0.376	mg	984293	41718
Silicon Die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.004	mg	10471	444
Silicon Die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.002	mg	5236	222
Leadframe	Copper & its alloys			supplier	Alloy	Cu	7440-50-8		4.656	mg	969798	516587
Leadframe				supplier	Alloy	Fe	7439-89-6		0.113	mg	23537	12537
Leadframe				supplier	Alloy	P	7723-14-0		0.004	mg	833	444
Leadframe				supplier	Alloy	Zn	7440-66-6		0.006	mg	1250	666
Leadframe				supplier	Alloy	Ag	7440-22-4		0.022	mg	4582	2441
Die attach	Other Organic Materials	0.1	mg	supplier	Epoxy	2,6-diglycidylphenyl glycid ether	13561-08-5		0.035	mg	350000	3883
Die attach				supplier	Epoxy	Polymeric Resin	68475-94-5		0.04	mg	400000	4438
Die attach				supplier	Epoxy	2,6-diglycidylphenyl allyl ether oligamer	Proprietary		0.02	mg	200000	2219
Die attach				supplier	Epoxy	Imidazole derivative	Proprietary		0.005	mg	50000	555
Bonding wire	Other inorganic materials	0.27	mg	supplier	Wire	Au	7440-57-5		0.27	mg	1000000	29957
Encapsulation	Other Organic Materials	3.26	mg	supplier	Molding compound	Fused Silica	60676-86-0		2.853	mg	875153	316543
Encapsulation				supplier	Molding compound	Epoxy Resin	Trade Secret		0.163	mg	50000	18085
Encapsulation				supplier	Molding compound	Carbon Black	1333-86-4		0.016	mg	4908	1775
Encapsulation				supplier	Molding compound	Epoxy cresol novalc	29690-82-2		0.065	mg	19939	7212
Encapsulation				supplier	Molding compound	Phenol resin	9003-35-4		0.163	mg	50000	18085
Finishing	Other inorganic materials	0.2	mg	supplier	Connection coating	Tin	7440-31-5		0.2	mg	1000000	22190