



## 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>2014-02-21</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
	HZGR*L957AA6	A	SH1A	2014-02-21
Amount	UoM	Unit type	ST ECOPACK Grade	
290.00	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	bright, annealed Tin/Silver/Bismuth	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.085X6.614X2.3	6	gull wing	
Comment	Package: TO-252 DPAK Cu Wire			

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 December 2013				
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	HZGR*L957AA6					
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	4.747	mg	supplier	die	Silicon (Si)	7440-21-3		4.659	mg	981462	16066
				supplier	metallization	Aluminium (Al)	7429-90-5		0.039	mg	8216	134
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.02	mg	4213	69
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.025	mg	5266	86
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	211	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.003	mg	632	10
Leadframe	Copper & its alloys	177.917	mg	supplier	alloy	Copper (Cu)	7440-50-8		177.686	mg	998702	612710
				supplier	alloy	Iron (Fe)	7439-89-6		0.082	mg	461	283
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.149	mg	837	514
Soft solder	Other organic materials	3.836	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.663	mg	954901	12631
				supplier	solder	Silver (Ag)	7440-22-4		0.096	mg	25026	331
				supplier	solder	Tin (Sn)	7440-31-5		0.077	mg	20073	266
Bonding wire	Other inorganic materials	0.275	mg	supplier	wire	Copper (Cu)	7440-50-8		0.275	mg	1000000	948
				supplier	mold compound	Epoxy Resin	Proprietary		3.065	mg	29996	10569
encapsulation	Other organic materials	102.18	mg	supplier	mold compound	2,2'-((3,3',5,5'-tetramethyl-1,1'-biphenyl)-4,4'	EC 413-900-7		4.087	mg	39998	14093
				supplier	mold compound	phenol resin	Proprietary		5.109	mg	50000	17617
				supplier	mold compound	Silica, vitreous	60676-86-0		89.408	mg	875005	308303
				supplier	mold compound	Carbon black	1333-86-4		0.511	mg	5001	1762
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3603