



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D
<i>* : Required Field</i>			

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-02-25
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giuseppe Vitali Palma	Representative Title	AMS & IPD Materials Declaration Champion
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
	HZGR*L965AA6	A	SH1A	2013-02-25
Amount	UoM	Unit type	ST ECOPACK Grade	
331.30	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	3	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-19 December 2012				
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*L965AA6					
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	1.902	mg	supplier	die	Silicon (Si)	7440-21-3		1.867	mg	981598	5635
				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	8412	48
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.008	mg	4206	24
						Silicon Oxide(SiO2)	7631-86-9		0.01	mg	5258	30
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.001	mg	526	3
Leadframe	Copper & its alloys	213.855	mg	supplier	alloy	Copper (Cu)	7440-50-8		213.577	mg	998700	644663
						Iron (Fe)	7439-89-6		0.098	mg	458	296
						Iron Phosphide (FeP)	26508-33-8		0.18	mg	842	543
Soft solder	Other organic materials	1.864	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.78	mg	954936	5373
				supplier	solder	Silver (Ag)	7440-22-4		0.047	mg	25215	142
						Tin (Sn)	7440-31-5		0.037	mg	19850	112
Bonding wire	Other inorganic materials	0.077	mg	supplier	wire	Copper (Cu)	7440-50-8		0.077	mg	1000000	232
						Epoxy Resin	Proprietary		3.377	mg	30003	10193
						2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'	EC 413-900-7		4.502	mg	39998	13589
						phenol resin	Proprietary		5.628	mg	50001	16988
						Silica, vitreous	60676-86-0		98.487	mg	874997	297274
encapsulation	Other organic materials	112.557	mg			Carbon black	1333-86-4		0.563	mg	5002	1699
						Tin (Sn)	7440-31-5		1.045	mg	1000000	3154
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3154