



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 *	2014-08-05
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

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*UT88AA6	A	SH1A	2014-08-05
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 o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.085X6.614X2.3	4	gull wing	
Comment	Package: TO-252 DPAK Cu Wire; MD valid for LD39150DT33-R			

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*UT88AA6					
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	1.271	mg	supplier	die	Silicon (Si)	7440-21-3		1.23	mg	967742	3713
				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	12589	48
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.005	mg	3934	15
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.007	mg	5507	21
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	787	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	2360	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	7081	27
Leadframe	Copper & its alloys	191.656	mg	supplier	alloy	Copper (Cu)	7440-50-8		191.407	mg	998701	577745
				supplier	alloy	Iron (Fe)	7439-89-6		0.088	mg	459	266
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.161	mg	840	486
Soft solder	Other organic materials	1.362	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.301	mg	955213	3927
				supplier	solder	Silver (Ag)	7440-22-4		0.034	mg	24963	103
				supplier	solder	Tin (Sn)	7440-31-5		0.027	mg	19824	81
Bonding wire	Other inorganic materials	0.321	mg	supplier	wire	Copper (Cu)	7440-50-8		0.321	mg	1000000	969
				supplier	mold compound	Epoxy Resin	Proprietary		4.069	mg	29997	12282
				supplier	mold compound	2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'	EC 413-900-7		5.426	mg	40001	16378
				supplier	mold compound	phenol resin	Proprietary		6.782	mg	49998	20471
				supplier	mold compound	Silica, vitreous	60676-86-0		118.69	mg	875005	358255
encapsulation	Other organic materials	135.645	mg	supplier	mold compound	Carbon black	1333-86-4		0.678	mg	4998	2046
				supplier	mold compound	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