



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-02-16
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 *	Giovanni Giacomello	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/web/en/support/support.html		


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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	A977*U002HAZ	A	MU1A	2015-02-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	1910.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
ting is used or other bulk terminati	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	15.9 - 11 - 3.5	20	gull wing	
Comment	Package: PowerSO 20 .43 SLUG DOWN; MDF valid for L6201PS; L6201PSTR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - 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)

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Exemption Id.	Description
	#N/A
	#N/A

QueryList : REACH-17th December 2014				
Query				Response
1 - Product(s) 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	A977*U002HAZ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	14.818	mg	supplier	die	Silicon (Si)	7440-21-3		14.420	mg	973141	7550
				supplier	metallization	Aluminium (Al)	7429-90-5		0.089	mg	6006	47
				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.081	mg	5466	42
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.125	mg	8436	65
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	540	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.022	mg	1485	12
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.073	mg	4926	38
Leadframe	Copper & Its alloys	397.634	mg	supplier	alloy	Copper (Cu)	7440-50-8		392.235	mg	986422	205359
				supplier	alloy	Iron (Fe)	7439-89-6		0.393	mg	988	206
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.118	mg	297	62
				supplier	metallization	Silver (Ag)	7440-22-4		4.888	mg	12293	2559
Soft solder	Solder	9.353	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.119	mg	974981	4774
				supplier	solder	Silver (Ag)	7440-22-4		0.140	mg	14968	73
				supplier	solder	Tin (Sn)	7440-31-5		0.094	mg	10050	49
Bonding wire	Other inorganic materials	0.870	mg	supplier	wire	Copper (Cu)	7440-50-8		0.870	mg	1000000	455
encapsulation	Other inorganic materials	1485.669	mg	supplier	mold compound	silica vitreous	60676-86-0		1249.894	mg	841300	654395
				supplier	mold compound	Phenolic resin	Proprietary		65.335	mg	43977	34207
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		51.132	mg	34417	26771
				supplier	mold compound	carbon black	1333-86-4		2.841	mg	1912	1487
				supplier	mold compound	Epoxy resin	Proprietary		65.335	mg	43977	34207
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		51.132	mg	34417	26771