



## 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>	2015-10-07
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD MD 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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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
L6376D	A977*U591DA6	A	MU1A	2015-10-07
Amount		UoM	Unit type	ST ECOPACK Grade
1911.24		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	
NAC	Tin (Sn), matte	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			

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)

QueryList : REACH-15th June 2015				
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*U591DA6					
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	13.524	mg	supplier	die	Silicon (Si)	7440-21-3		13.033	mg	963691	6819
				supplier	metallization	Aluminium (Al)	7429-90-5		0.074	mg	5472	39
				supplier	Passivation	Silicon Nitride	12033-89-5		0.042	mg	3106	22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.175	mg	12941	92
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	592	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.020	mg	1479	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.066	mg	4881	35
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.106	mg	7838	55
Leadframe	Copper & its alloys	398.167	mg	supplier	alloy	Copper (Cu)	7440-50-8		392.760	mg	986420	205500
				supplier	alloy	Iron (Fe)	7439-89-6		0.394	mg	990	206
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.118	mg	296	62
				supplier	metallization	Silver (Ag)	7440-22-4		4.895	mg	12294	2561
Soft solder	Solder	9.365	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.131	mg	975013	4778
				supplier	solder	Silver (Ag)	7440-22-4		0.140	mg	14949	73
				supplier	solder	Tin (Sn)	7440-31-5		0.094	mg	10037	49
Bonding wire	Other inorganic materials	0.871	mg	supplier	wire	Copper (Cu)	7440-50-8		0.871	mg	1000000	456
				supplier	mold compound	silica vitreous	60676-86-0		1251.566	mg	841301	654845
Encapsulation	Other inorganic materials	1487.655	mg	supplier	mold compound	Phenolic resin	29690-82-2		65.422	mg	43977	34230
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		51.200	mg	34417	26789
				supplier	mold compound	carbon black	1333-86-4		2.845	mg	1912	1489
				supplier	mold compound	Epoxy resin	25068-38-6		65.422	mg	43977	34230
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		51.200	mg	34417	26789
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.658	mg	1000000	867