



## 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>	2015-07-17
<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>	Giovanni Giacobello	<b>Representative Title</b>	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>	true	<b>Legal Declaration *</b>	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
	A68C*UQ36BA1	A	MU1A	2015-07-17
Amount	UoM	Unit type	ST ECOPACK Grade	
1.929,670	mg	Each	ECOPACK® 1	

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	
Not Applicable ; if coating is used	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	15.9X11X3.5	36	gull wing	
Comment	Package: PowerSO 36 .430 BODY WIDTH; L6470PD; L6470PDTR			

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-15th June 2015				
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	A68C*UQ368A1					
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	6.94	mg	supplier	die	Silicon (Si)	7440-21-3		6.625	mg	954611	3433
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.068	mg	9798	35
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.054	mg	7781	28
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.014	mg	2017	7
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.116	mg	16715	60
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.038	mg	5476	20
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.017	mg	2450	9
die (s)				supplier	passivation	Alcoxysilane	proprietary		0.001	mg	144	1
die (s)				supplier	passivation	Aryl Siliclic Acid	proprietary		0.001	mg	144	1
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	144	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	144	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	576	2
Leadframe	Copper & its alloys	1242.445	mg	supplier	alloy	Copper (Cu)	7440-50-8		1238.837	mg	997096	641994
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.571	mg	460	296
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.042	mg	839	540
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.995	mg	1606	1034
Soft solder		5.223	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	5.093	mg	975110	2639
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.078	mg	14934	40
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.052	mg	9956	27
Bonding wire	Other inorganic materials	1.762	mg	supplier	wire	Gold (Au)	7440-57-5		1.744	mg	989784	904
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.011	mg	6243	6
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0.005	mg	2838	3
Bonding wire				supplier	wire	Platinum (Pt)	7440-06-4		0.002	mg	1135	1
encapsulation	Other Organic Materials	667.354	mg	supplier	mold compound	Silica, vitreous	60676-86-0		493.843	mg	740002	255921
encapsulation				supplier	mold compound	epoxy resin	Proprietary		60.062	mg	90000	31126
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		8.008	mg	12000	4150
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		40.041	mg	60000	20750
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		40.041	mg	60000	20750
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		13.347	mg	20000	6917
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	68541-56-0		10.01	mg	15000	5187
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.002	mg	3000	1037
connections coating	Solder	5.946	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.946	mg	1000000	3081