



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 *	2016-09-19
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG MD 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		

Uncertainty Statement

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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
L9651	G977*UB51AC6	A	MUAR B/E	2016-09-19
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK2

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	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-20th June 2016				
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	G977*UBS1AC6					
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	14.004	mg	supplier	die	Silicon (Si)	7440-21-3		13.495	mg	963653	7103
				supplier	metallization	Aluminium (Al)	7429-90-5		0.077	mg	5498	41
				supplier	Passivation	Silicon Nitride	12033-89-5		0.043	mg	3071	23
				supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	12925	95
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	571	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.021	mg	1500	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.069	mg	4927	36
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.110	mg	7855	58
Leadframe	Copper & its alloys	436.261	mg	supplier	alloy	Copper (Cu)	7440-50-8		430.813	mg	987512	226744
				supplier	alloy	Iron (Fe)	7439-89-6		0.431	mg	988	227
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.129	mg	296	68
				supplier	metallization	Silver (Ag)	7440-22-4		4.888	mg	11204	2573
Soft solder	Solder	9.542	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.826	mg	924963	4645
				supplier	solder	Indium (In)	7440-74-6		0.477	mg	49990	251
				supplier	solder	Silver (Ag)	7440-22-4		0.239	mg	25047	126
Bonding wires	Other inorganic materials	1.156	mg	supplier	wire	Copper (Cu)	7440-50-8		1.156	mg	1000000	608
Encapsulation	Other Organic Materials	1434.898	mg	supplier	mold compound	silica vitreous	60676-86-0		1259.840	mg	878000	663074
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		86.094	mg	60000	45313
				supplier	mold compound	Phenol Resin	205830-20-2		57.396	mg	40000	30208
				supplier	mold compound	epoxy resin	25068-38-6		28.698	mg	20000	15104
				supplier	mold compound	carbon black	1333-86-4		2.870	mg	2000	1511
Connections coating	Solder	4.139	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.139	mg	1000000	2178