



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 *	2017-01-16
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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

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
E-L9935013TR	G677*U475CB6	A	0959	2017-01-16
Amount		UoM	Unit type	ST ECOPACK Grade
1918.74		mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	15.9-11-3.5	20	gull wing	
Comment	PowerSO 20 .43 SLUG DOWN			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	G677*U475CB6					
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	17.921	mg	supplier	die	Silicon (Si)	7440-21-3		17.333	mg	967189	9034
				supplier	metallization	Aluminium (Al)	7429-90-5		0.104	mg	5803	54
				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	113	1
				supplier	Passivation	Silicon Nitride	12033-89-5		0.039	mg	2176	20
				supplier	Passivation	Silicon Oxide	7631-86-9		0.178	mg	9932	93
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.010	mg	558	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.026	mg	1451	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.088	mg	4910	45
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.141	mg	7868	73
				supplier	alloy	Copper (Cu)	7440-50-8		430.813	mg	987512	224529
Leadframe	Copper & its alloys	436.261	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.431	mg	988	225
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.129	mg	296	67
				supplier	metallization	Silver (Ag)	7440-22-4		4.888	mg	11204	2548
				supplier	metallization	Lead (Pb)	7439-92-1	7a-Lead in high me	12.089	mg	974998	6300
Soft solder	Solder	12.399	mg	supplier	solder	Silver (Ag)	7440-22-4		0.186	mg	15001	97
				supplier	solder	Tin (Sn)	7440-31-5		0.124	mg	10001	65
				supplier	wire	Gold (Au)	7440-57-5		2.680	mg	1000000	1397
Bonding wires	Other inorganic materials	2.680	mg	supplier	wire	Gold (Au)	7440-57-5		2.680	mg	1000000	1397
				supplier	mold compound	silica vitreous	60676-86-0		1269.008	mg	878000	661376
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		86.720	mg	60000	45196
				supplier	mold compound	Phenol Resin	205830-20-2		57.814	mg	40000	30131
				supplier	mold compound	epoxy resin	25068-38-6		28.907	mg	20000	15066
Encapsulation	Other Organic Materials	1445.340	mg	supplier	mold compound	carbon black	1333-86-4		2.891	mg	2000	1507
				supplier	mold compound	Tin (Sn)	7440-31-5		4.139	mg	1000000	2157
				supplier	solder alloy	Tin (Sn)	7440-31-5		4.139	mg	1000000	2157