



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 *	2018-09-04
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacobello	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
STL92N10F7AG	R2Y5*OD0EQ52	A	3068	2018-09-04
	Amount	UoM	Unit type	ST ECOPACK Grade
	95	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	6x5x1	8	flat	
Comment	PowerFLAT 5x6 WF			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
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
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 25th May 2018			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.36	Die - Leadframe	3768
Lead	4.76	Soft solder	50074

QueryList : REACH-27th June 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	4.76		50074
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	4.76		954837

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	R2Y5*OD0EQS2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	3.878	mg	supplier	die	Silicon (Si)	7440-21-3		3.728	mg	961320	39242
				supplier	metallization	Aluminium (Al)	7429-90-5		0.065	mg	16761	684
				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	516	21
				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	3352	137
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	5415	221
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	774	32
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.031	mg	7994	326
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	516	21
Leadframe	M-004 Copper and its alloys	42.682	mg	supplier	alloy	Silver (Ag)	7440-22-4		0.013	mg	3352	137
				supplier	alloy	Copper (Cu)	7440-50-8		42.297	mg	990980	445232
				supplier	alloy	Iron (Fe)	7439-89-6		0.020	mg	469	211
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.036	mg	843	379
				supplier	metallization	Nickel (Ni)	7440-02-0		0.327	mg	7661	3442
				supplier	metallization	Phosphorus (P)	7723-14-0		0.002	mg	47	21
Soft solder	Solder	4.982	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.757	mg	954837	50074
				supplier	solder	Silver (Ag)	7440-22-4		0.125	mg	25090	1316
				supplier	solder	Tin (Sn)	7440-31-5		0.100	mg	20073	1052
Bonding wire	M-003 Aluminum and its alloys	0.068	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.068	mg	1000000	716
Bonding Ribbons	M-009 Other non-ferrous metals and	2.926	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		2.926	mg	1000000	30800
Encapsulation	M-011 Other inorganic materials	40.308	mg	supplier	mold compound	Silica, vitreous	60676-86-0		31.641	mg	784981	333063
				supplier	mold compound	epoxy resin	Proprietary		5.240	mg	129999	55158
				supplier	mold compound	phenol resin	9003-35-4		2.419	mg	60013	25463
				supplier	mold compound	metal hydroxide	Proprietary		0.806	mg	19996	8484
				supplier	mold compound	Carbon black	1333-86-4		0.202	mg	5011	2126
Connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1642