



## 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>	2019-07-02
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		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 Giacopello	<b>Representative Title</b>	ADG 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

**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
2STR2160	CSVX*BI15T6F	A	998G	2019-07-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	10	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	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.9X1.625X1.175	3	gull wing	
Comment	Package: SOT-23			

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	TRUE
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)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 28th June 2019			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

QueryList : REACH-15th January 2019				
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
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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CSVX*B11516F					
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	0.321	mg	supplier	die	Silicon (Si)	7440-21-3		0.310	mg	965732	31000
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	15576	500
				supplier	Passivation	Silicon Oxide	7631-86-9		0.005	mg	15576	500
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	3116	100
				supplier	alloy	Copper (Cu)	7440-50-8		3.287	mg	950275	328700
Leadframe	M-004 Copper and its alloys	3.459	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.079	mg	22839	7900
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.003	mg	866	300
				supplier	alloy	Zinc (Zn)	7440-66-6		0.005	mg	1446	500
				supplier	metallization	Silver (Ag)	7440-22-4		0.085	mg	24574	8500
				supplier	glue	Silver(Ag)	7440-22-4		0.135	mg	784883	13500
Die attach	M-011 Other inorganic materials	0.172	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.025	mg	145349	2500
				supplier	glue	Bismaleimide resin	35325-39-4		0.006	mg	34884	600
				supplier	glue	polymer	Proprietary		0.006	mg	34884	600
				supplier	wire	Copper (Cu)	7440-50-8		0.020	mg	1000000	2000
Bonding wires	M-004 Copper and its alloys	0.020	mg	supplier	wire	Copper (Cu)	7440-50-8		0.020	mg	1000000	2000
Encapsulation	M-011 Other inorganic materials	5.919	mg	supplier	mold compound	Epoxy Resin	25068-38-6		0.444	mg	75013	44400
				supplier	mold compound	Phenol Resin	29690-82-2		0.295	mg	49839	29500
				supplier	mold compound	Silica, vitreous	60676-86-0		5.127	mg	866194	512700
				supplier	mold compound	Carbon black	1333-86-4		0.028	mg	4730	2800
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.025	mg	4224	2500
connections coating	Solder	0.109	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.109	mg	1000000	10900