



## Materials Declaration Form

<b>IPC</b>	<b>1752</b>	<b>Version</b>	<b>2</b>
<b>Form Type *</b>	<b>Distribute</b>		
<b>Sectionals *</b>	<b>Material Info</b> <b>Manufacturing Info</b>	<b>Subsectionals *</b>	<b>A-D</b>
<i>* : Required Field</i>			

<b>Supplier Information</b>			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2018-06-28</b>
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Authorized Representative *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Rossana Bonaccorso</b>	<b>Representative Title</b>	<b>ADG MD Champion</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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**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
STN83003	CSLL*IV32N6F	A	998G	2018-06-28
Amount	UoM	Unit type	ST ECOPACK Grade	
110.00	mg	Each	ECOPACK2	
	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	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
DSO	6.5-3.5-1.8	4	gull wing
Comment	SOT 223		

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	0.01	Die	91
Lead	1.49	Soft solder	13545

QueryList : REACH-15th January 2018				
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	CSLL*IV32N6F					
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	1.639	mg	supplier	die	Silicon (Si)	7440-21-3		1.561	mg	952410	14191
				supplier	metallization	Aluminium (Al)	7429-90-5		0.036	mg	21965	327
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	3660	55
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	12813	191
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	610	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.010	mg	6101	91
Leadframe	M-004 Copper and its alloys	92.066	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.004	mg	2441	36
				supplier	alloy	Copper (Cu)	7440-50-8		91.458	mg	993396	831436
				supplier	alloy	Iron (Fe)	7439-89-6		0.092	mg	999	836
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.028	mg	304	257
				supplier	metallization	Silver (Ag)	7440-22-4		0.488	mg	5301	4436
Soft solder	Solder	1.560	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	1.490	mg	955128	13545
				supplier	solder	Silver (Ag)	7440-22-4		0.039	mg	25000	355
				supplier	solder	Tin (Sn)	7440-31-5		0.031	mg	19872	282
Bonding wires	M-011 Other inorganic materials	0.091	mg	supplier	wire	Copper (Cu)	7440-50-8		0.091	mg	1000000	827
Encapsulation	M-011 Other inorganic materials	11.882	mg	supplier	mold compound	Silica, vitreous	60676-86-0		10.326	mg	869046	93873
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.951	mg	80038	8645
				supplier	mold compound	Phenol Resin	26834-02-6		0.475	mg	39976	4318
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.071	mg	5975	645
Connections coating	Solder	2.762	mg	supplier	mold compound	Carbon black	1333-86-4		0.059	mg	4965	536
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.762	mg	1000000	25109