



## 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>

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-07-13</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<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>

**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
STPS2L60A	HNSR*Z25Q81U	A	ZA41	2020-07-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	68.00	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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

  
 life.augmented

Package Designator	Size	Nbr of instances	Shape	
SOJ	4.3-2.77-2	2	j bend	
Comment	SMA			

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 3rd January 2020			
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 - Leadframe	176
Lead	2.53	Soft solder	37162

QueryList : REACH-16th January 2020				
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	2.53	Soft solder	37162
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	2.53	Soft solder	925302

Material Composition Declaration :						Mfr Item Name	HNSR*Z25Q81U					
note : Substance present with less 0.001mg will not be declared in this document												
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	1.279	mg	supplier	die	Silicon (Si)	7440-21-3		1.086	mg	849100	15971
				supplier	metallization	Aluminium (Al)	7429-90-5		0.045	mg	35184	662
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	3909	74
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	782	15
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1564	29
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5473	103
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	782	15
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1564	29
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	5473	103
				supplier	polymer die coating	Durimide	Proprietary		0.123	mg	96169	1809
Leadframe & Clip	Copper and its alloy	26.101	mg	supplier	alloy	Copper (Cu)	7440-50-8		26.088	mg	999502	383647
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	38	15
				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	115	44
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.009	mg	345	132
Soft solder	Solder	2.731	mg	supplier	solder	Silver (Ag)	7440-22-4		0.067	mg	24533	985
				supplier	solder	Tin (Sn)	7440-31-5		0.137	mg	50165	2015
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.527	mg	925302	37162
Encapsulation	Other inorganic materials	37.268	mg	supplier	mold compound	Amorphous Silica	7631-86-9		22.965	mg	616212	337721
				supplier	mold compound	Quartz	14808-60-7		7.453	mg	199984	109603
				supplier	mold compound	epoxy resin	Proprietary		4.472	mg	119996	65765
				supplier	mold compound	phenolic resin	9003-35-4		2.236	mg	59998	32882
				supplier	mold compound	Bismuth trioxide	1304-76-3		0.026	mg	698	382
				supplier	mold compound	chlorine residue	7782-50-5		0.004	mg	107	59
Connections coating	Solder	0.621	mg	supplier	mold compound	Carbon black	1333-86-4		0.112	mg	3005	1647
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.621	mg	1000000	9132