



## 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  * : Required Field

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2019-03-20
<b>Company Unique ID</b>	NL 008751171801		
<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>	Rossana Bonaccorso	<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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<b>Legal Statement</b>			
<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
STPS2L40U	HNZJZ73Q81Y	A	9941	2019-03-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	107	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	
SOJ	4.50X2.16X3.68	2	J bend	
Comment	Package: SMB CLIP (SOD 6 NEW)			

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 26th October 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	0.02	Die	196
Lead	2.32	Soft solder	21692

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	2.32		21692
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	2.32	Soft solder	924701

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HNZJZ73Q81Y					
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	1.959	mg	supplier	die	Silicon (Si)	7440-21-3		1.863	mg	950947	17411
				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	6125	112
				supplier	metallization	Gold (Au)	7440-57-5		0.008	mg	4084	75
				supplier	passivation	Nickel (Ni)	7440-02-0		0.008	mg	4084	75
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1021	19
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	1531	28
				supplier	Passivation	Silicon Oxide	7631-86-9		0.011	mg	5615	103
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	510	9
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1531	27
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.013	mg	6636	121
Leadframe & Clip	M-004 Copper and its alloys	44.161	mg	supplier	polymer die coating	Durimide	Proprietary		0.035	mg	17916	328
				supplier	alloy	Copper (Cu)	7440-50-8		44.140	mg	999524	412523
				supplier	alloy	Iron (Fe)	7439-89-6		0.004	mg	91	37
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.015	mg	340	140
				supplier	alloy	Zinc (Zn)	7440-66-6		0.002	mg	45	19
Soft solder	Solder	2.510	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.321	mg	924701	21692
				supplier	solder	Silver (Ag)	7440-22-4		0.063	mg	25100	589
				supplier	solder	Tin (Sn)	7440-31-5		0.126	mg	50199	1178
Encapsulation	M-011 Other inorganic materials	57.355	mg	supplier	mold compound	silica fused	7631-86-9		42.441	mg	739970	396645
				supplier	mold compound	silica quartz	14808-60-7		11.470	mg	199983	107196
				supplier	mold compound	phenolic resin	9003-35-4		2.869	mg	50022	26813
				supplier	mold compound	carbon black	1333-86-4		0.575	mg	10025	5374
Connections coating	Solder	1.015	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.015	mg	1000000	9486