



## 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>			

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-06-18</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>giovanni giacopello</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
STPSC40065CW	H1LW*024L1T7	A	3068	2020-06-18
	Amount	UoM	Unit type	ST ECOPACK Grade
	4430	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		
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00637206	



Package Designator	Size	Nbr of instances	Shape	
SIP	15.75,20.15,5.15	3	Through hole	
Comment	TO 247			

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	1.30	die - leadframe	294
Lead	2.29	soft solder	518

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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm			
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	2.293	Soft solder	955019

Material Composition Declaration :						Mfr Item Name	H1LW*024L177					
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)
				supplier	die	Silicium carbide	409-21-2		3.757	mg	947064	848
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.042	mg	10587	9
				supplier	metallisation	Gold(Au)	7440-57-5		0.012	mg	3025	3
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.062	mg	15629	14
				supplier	metallisation	Silver(Ag)	7440-22-4		0.072	mg	18150	16
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	1008	1
				supplier	polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.018	mg	4537	4
Leadframe	M-004 Copper and its alloys	2709.936	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		2705.048	mg	998196	610619
				supplier	alloy & coating	Nicke(Ni)	7440-02-0		1.242	mg	458	280
				supplier	alloy & coating	Iron(Fe)	7439-89-6		2.709	mg	1000	612
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.813	mg	300	184
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.124	mg	46	28
Soft solder	Solder	2.401	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.293	mg	955018	518
				supplier	solder	Silver(Ag)	7440-22-4		0.060	mg	24990	14
				supplier	solder	Tin(Sn)	7440-31-5		0.048	mg	19992	11
Bonding wires	M-003 Aluminum and its alloys	5.787	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.787	mg	1000000	1306
Encapsulation	M-011 Other inorganic materials	1701.712	mg	supplier	mold compound	Silica vitreous	60676-86-0		1191.198	mg	700000	268893
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		263.765	mg	155000	59541
				supplier	mold compound	Quartz	14808-60-7		85.086	mg	50000	19207
				supplier	mold compound	Phenol resin	9003-35-4		102.103	mg	60000	23048
				supplier	mold compound	Metal hydroxide	proprietary		51.051	mg	30000	11524
				supplier	mold compound	Carbon black	1333-86-4		8.509	mg	5000	1921
connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399