



## 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>	2019-04-26
<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
STPS3L45AF	7NCS*Z25Q835	A	ZA41	2019-04-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	35	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	
QFJ	4.14,2.76,1.94	1	J bend	
Comment	Package: SMA Flat 2 Leads No exposed pad			

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	0.01	Die	343
Lead	2.39	Soft solder	68200

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	2.39	Soft solder	68200
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	2.39	Soft solder	925194

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	7NCS*Z25Q83S					
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	0.989	mg	supplier	die	Silicon (Si)	7440-21-3		0.931	mg	941831	26600
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	7081	200
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	5058	143
				supplier	metallization	Nickel (Ni)	7440-02-0		0.005	mg	5058	143
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1012	29
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	2023	57
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	7083	200
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	1012	29
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	2023	57
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	7081	200
Leadframe & Clip	Copper & its alloys	15.288	mg	supplier	polymer die coating	Durimide	Proprietary		0.021	mg	20738	586
				supplier	alloy	Copper (Cu)	7440-50-8		15.265	mg	998496	436143
				supplier	alloy	Iron (Fe)	7439-89-6		0.018	mg	1177	526
				supplier	alloy	Phosphorus (P)	7723-14-0		0.005	mg	327	143
Die attach	Other Organic Materials	2.580	mg	supplier	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.387	mg	925194	68200
				supplier	soft solder	Tin (Sn)	7440-31-5		0.129	mg	50000	3686
				supplier	soft solder	Silver (Ag)	7440-22-4		0.064	mg	24806	1829
Encapsulation	Other inorganic materials	15.513	mg	supplier	mold compound	Silica , amorphous,fused	60676-86-0		12.410	mg	799974	354571
				supplier	mold compound	Epoxy resin proprietare,resin unknow	29690-82-2		2.094	mg	134984	59829
				supplier	mold compound	Benzophenone teracarboxylic anhydride	2421-28-5		0.155	mg	9992	4429
				supplier	mold compound	Silica, quartz	14808-60-7		0.699	mg	45059	19971
				supplier	mold compound	Carbon black	1333-86-4		0.155	mg	9991	4429
Connection coating	Solder	0.630	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.630	mg	1000000	18000