



## 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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2019-03-21
<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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Legal Statement		
<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
	7N6Y*Z70P83R	A	ZA41	2019-03-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	50	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	
SMC	4.3 - 3.75 - 1	2	flat	
Comment	Package: SMB Flat NEP - MDF valid for CPs: STPS3150UF and STPS3170UF			

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	360
Lead	2.57	Soft solder	51300

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	2.57	Soft solder	51300
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	2.57	Soft solder	924991

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	7N6V*Z70P83R					
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	1.405	mg	supplier	die	Silicon (Si)	7440-21-3		1.326	mg	943638	26520
				supplier	metallization	Aluminium (Al)	7429-90-5		0.010	mg	7116	200
				supplier	metallization	Gold (Au)	7440-57-5		0.007	mg	4981	140
				supplier	passivation	Nickel (Ni)	7440-02-0		0.007	mg	4981	140
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	713	20
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1423	40
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	6405	180
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	712	20
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1423	40
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.011	mg	7828	220
				supplier	polymer die coating	Durimide	Proprietary		0.029	mg	20780	584
				Supplier	alloy	Copper (Cu)	7440-50-8		24.154	mg	998718	483080
Lead-frame & Clip	Copper & its alloys	24.185	mg	Supplier	alloy	Iron (Fe)	7439-89-6		0.024	mg	993	480
				Supplier	alloy	Phosphorus (P)	12185-10-3		0.007	mg	289	140
				Supplier	soft solder	Silver (Ag)	7440-22-4		0.070	mg	25243	1400
Die Attach	Solder	2.773	mg	Supplier	soft solder	Tin (Sn)	7440-31-5		0.138	mg	49766	2760
				Supplier	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.565	mg	924991	51300
				Supplier	Molding Compound	Silica , amorphous,fused	60676-86-0		17.229	mg	829674	344580
Encapsulation	Other inorganic materials	20.766	mg	Supplier	Molding Compound	Epoxy resin proprietare,resin unknown	29690-82-2		2.792	mg	134451	55840
				Supplier	Molding Compound	Benzophenone teracarboxylic anhydride	2421-28-5		0.114	mg	5490	2280
				Supplier	Molding Compound	Silica, quartz	14808-60-7		0.517	mg	24895	10340
				Supplier	Molding Compound	Carbon black	1333-86-4		0.114	mg	5490	2276
				Supplier	Molding Compound	Tin (Sn)	7440-31-5		0.871	mg	1000000	17420
Connections coating	Solder	0.871	mg	Supplier	solder alloy	Tin (Sn)	7440-31-5		0.871	mg	1000000	17420