



## 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>	2019-03-20
<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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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
STTH2R06	HNPP*F83B81B	A	ZA41	2019-03-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	340	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
Not Applicable	Not Applicable	Not Applicable		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
AXL	5X7.5X2.37	2	Through-hole	
Comment	DO 41 PLASTIC			

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	38
Lead	2.04	Soft solder	5985

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	2.04	Soft solder	5985
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	2.04	Soft solder	925000

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HNPP*F83B81B					
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	1.224	mg	supplier	die	Silicon (Si)	7440-21-3		1.189	mg	971405	3497
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	5719	21
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	4085	15
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	4085	15
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5719	21
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	817	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1634	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	6536	24
Lead frame	Other inorganic materials	249.097	mg	supplier	alloy	Copper (Cu)	7440-50-8		248.977	mg	999518	732285
				supplier	alloy	Zinc (Zn)	7440-66-6		0.010	mg	40	29
				supplier	alloy	Iron (Fe)	7439-89-6		0.025	mg	100	74
				supplier	alloy	Phosphorus (P)	12185-10-3		0.085	mg	342	250
Solder balls	solder	2.200	mg	supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.035	mg	925000	5985
				supplier	solder	Tin (Sn)	7440-31-5		0.055	mg	25000	162
				supplier	solder	Silver (Ag)	7440-22-4		0.110	mg	50000	322
Encapsulation	Other inorganic materials	84.001	mg	supplier	Molding Compound	Silica fused(SiO2)	7631-86-9		30.237	mg	359960	88932
				supplier	Molding Compound	silica quartz	14808-60-7		48.725	mg	580053	143309
				supplier	Molding Compound	phenolic resin	9003-35-4		4.199	mg	49987	12350
				supplier	Molding Compound	carbon black	1333-86-4		0.840	mg	10000	2471
Connections coating	solder	3.478	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.478	mg	1000000	10229