



## 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>

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-03-16</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 Giacobello</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
STTH3R02	HNBH*D80F814	A	9941	2020-03-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	1120	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	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	CD00271974	

Package Designator	Size	Nbr of instances	Shape	
RAD	9 - 16 - 5.2	2	Through-hole	
Comment	DO201AD			

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	0.02	die	15
Lead	4.61	soft solder	4118

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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	4.61	Soft solder	4118
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	4.612	Soft solder	924990

Material Composition Declaration :						Mfr Item Name	HNBH*D80F814					
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)
Die	M-011 Other inorganic materials	1.544	mg	supplier	die	Silicon(Si)	7440-21-3		1.468	mg	950777	1310
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.009	mg	5829	8
				supplier	metallisation	Gold(Au)	7440-57-5		0.009	mg	5829	8
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.017	mg	11010	15
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	1295	2
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	1295	2
				supplier	passivation	Silicon oxide	7631-86-9		0.009	mg	5829	8
				supplier	polymer coating	Durimide	proprietary		0.028	mg	18136	25
Leadframe	M-004 Copper and its alloys	941.689	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		941.235	mg	999518	840388
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.095	mg	101	85
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.321	mg	341	287
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.038	mg	40	34
Soft solder	Solder	4.986	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high melting temper	4.612	mg	924990	4118
				supplier	solder	Silver (Ag)	7440-22-4		0.124	mg	24870	111
				supplier	solder	Tin (Sn)	7440-31-5		0.250	mg	50140	223
Encapsulation	M-011 Other inorganic materials	160.832	mg	supplier	mold compound	Silica fused	7631-86-9		64.333	mg	400001	57440
				supplier	mold compound	silica quartz	14808-60-7		92.479	mg	575004	82571
				supplier	mold compound	phenolic resin	9003-35-4		3.216	mg	19996	2871
				supplier	mold compound	carbon black	1333-86-4		0.804	mg	4999	718
connections coating	Solder	10.949	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		10.949	mg	1000000	9776