



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Sectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-09-27
<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>	Giovanni Giacopello	<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**

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


**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
STPS1L60A	HNSR*Z24Q81U	A	ZA41	2017-09-27
Amount	UoM	Unit type	ST ECOPACK Grade	
70	mg	Each	ECOPACK® 2	

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, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMC	4.3-2.77-2	2	J bend	
Comment	Package: SMA			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : California Prop65 list, dated 7th July 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.01	Die	100
Lead	2.66	Soft solder	37929

QueryList : REACH-7th July 2017				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HNSR*Z24Q81U				5000000.0	1000000.0
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	0.753	mg	supplier	die	Silicon (Si)	7440-21-3		0.639	mg	848606	9129
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	35857	386
				supplier	passivation	Nickel (Ni)	7440-02-0		0.003	mg	3984	43
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1328	14
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1328	14
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	5312	57
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1327	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	5312	56
				supplier	polymer die coating	Durimide	Proprietary		0.073	mg	96946	1043
				supplier								
Leadframe & clip	M-004 Copper and its alloys	27.066	mg	supplier	alloy	Copper (Cu)	7440-50-8		27.053	mg	999520	386471
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	37	14
				supplier	alloy	Iron (Fe)	7439-89-6		0.003	mg	110	43
				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.009	mg	333	129
Soft solder	Solder	2.871	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.655	mg	924765	37929
				supplier	solder	Tin (Sn)	7440-31-5		0.144	mg	50157	2057
				supplier	solder	Silver (Ag)	7440-22-4		0.072	mg	25078	1029
				supplier								
encapsulation	M-011 Other inorganic materials	38.664	mg	supplier	mold compound	Amorphous silica	7631-86-9		26.554	mg	686789	379343
				supplier	mold compound	Quartz	14808-60-7		9.673	mg	250181	138186
				supplier	mold compound	Phenol resin	9003-35-4		2.321	mg	60030	33157
				supplier	mold compound	carbon black	1333-86-4		0.116	mg	3000	1657
connections coating	Solder	0.646	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.646	mg	1000000	9229