



## 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>2018-06-08</b>
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Authorized Representative *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	<b>Rossana Bonaccorso</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**

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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
------------------------------	-------------	----------------------------	-----------------

**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
STU3N80K5	CLIK*VJ8AB52	A	3068	2018-06-08
Amount	UoM	Unit type	ST ECOPACK Grade	
310.00	mg	Each	ECOPACK2	
	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	
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
DIP	6.1-6.5-2.3	3	Through-hole
Comment	IPAK TO-251		

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 25th May 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	2.36	Die - Leadframe	7619
Lead	2.92	Soft solder	9432

QueryList : REACH-15th January 2018				
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
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CLIK*VJ8A852					
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	3.183	mg	supplier	die	Silicon (Si)	7440-21-3		3.031	mg	952246	9777
				supplier	metallization	Aluminium (Al)	7429-90-5		0.056	mg	17593	181
				supplier	metallization	Copper (Cu)	7440-50-8		0.021	mg	6598	68
				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	4085	42
				supplier	Passivation	Silicon Oxide	7631-86-9		0.032	mg	10053	103
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	628	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.021	mg	6598	68
Leadframe	M-004 Copper and its alloys	184.074	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	2199	23
				supplier	alloy	Copper (Cu)	7440-50-8		181.496	mg	985995	585471
				supplier	alloy	Iron (Fe)	7439-89-6		0.182	mg	989	588
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.055	mg	298	177
				supplier	metallization	Nickel (Ni)	7440-02-0		2.341	mg	12718	7552
Soft solder	Solder	3.062	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.924	mg	954931	9432
				supplier	solder	Silver (Ag)	7440-22-4		0.077	mg	25147	248
				supplier	solder	Tin (Sn)	7440-31-5		0.061	mg	19922	197
Bonding wires	M-011 Other inorganic materials	0.174	mg	supplier	wire	Copper (Cu)	7440-50-8		0.174	mg	1000000	561
Encapsulation	M-011 Other inorganic materials	115.804	mg	supplier	mold compound	Silica, vitreous	60676-86-0		101.329	mg	875004	326868
				supplier	mold compound	Tetramethyl-biphenyl-diy-bis oxymethylene-b	EC 413-900-7		4.632	mg	39999	14942
				supplier	mold compound	Epoxy Resin	25068-38-6		3.474	mg	29999	11206
				supplier	mold compound	phenol resin	29690-82-2		5.790	mg	49998	18677
				supplier	mold compound	Carbon black	1333-86-4		0.579	mg	5000	1868
Connections coating	Solder	3.703	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.703	mg	1000000	11945