



## 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>
<i>* : Required Field</i>			

<b>Supplier Information</b>			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2018-06-21</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>	<b>Rossana Bonaccorso</b>
<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**

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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
STU13NM60N	TXIK*M263B82	A	3068	2018-06-21
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		
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		


  
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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	0.25	Die - Leadframe	794
Lead	6.89	Soft solder	22223

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	TXIK*M263B82					
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	7.864	mg	supplier	die	Silicon (Si)	7440-21-3		7.551	mg	960198	24358
				supplier	metallization	Aluminium (Al)	7429-90-5		0.150	mg	19074	484
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	4578	116
				supplier	Passivation	Silicon Oxide	7631-86-9		0.053	mg	6740	171
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	509	13
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.052	mg	6612	168
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.018	mg	2289	56
Leadframe	M-004 Copper and its alloys	181.942	mg	supplier	alloy	Copper (Cu)	7440-50-8		181.495	mg	997543	585468
				supplier	alloy	Iron (Fe)	7439-89-6		0.182	mg	1000	587
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.055	mg	303	177
				supplier	metallization	Nickel (Ni)	7440-02-0		0.194	mg	1066	626
				supplier	metallization	Phosphorus (P)	7723-14-0		0.016	mg	88	52
Soft solder	Solder	7.213	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	6.889	mg	955081	22223
				supplier	solder	Silver (Ag)	7440-22-4		0.180	mg	24955	581
				supplier	solder	Tin (Sn)	7440-31-5		0.144	mg	19964	465
Bonding wires	M-011 Other inorganic materials	0.547	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.545	mg	996344	1758
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	3656	6
Encapsulation	M-011 Other inorganic materials	108.731	mg	supplier	mold compound	Silica, vitreous	60676-86-0		95.139	mg	874994	306900
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	EC 413-900-7		4.349	mg	39998	14029
				supplier	mold compound	Epoxy Resin	25068-38-6		3.262	mg	30001	10523
				supplier	mold compound	phenol resin	29690-82-2		5.437	mg	50004	17539
Connections coating	Solder	3.703	mg	supplier	mold compound	Carbon black	1333-86-4		0.544	mg	5003	1755
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.703	mg	1000000	11945