



## 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>2018-02-07</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**

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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
STD6N90K5	XNDP*VK92B5F	A	998G	2018-02-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	330	mg	Each	ECOPACK2

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	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	TO 252 DPAK			

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 15th December 2017			
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	1.18	Die / Leadframe	3564
Lead	5.41	Soft solder	16406

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	XNDP*VK92B5F				6000000.0	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	4.909	mg	supplier	die	Silicon (Si)	7440-21-3		4.517	mg	920147	13688
				supplier	metallization	Aluminium (Al)	7429-90-5		0.118	mg	24037	358
				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	407	6
				supplier	metallization	Nickel (Ni)	7440-02-0		0.026	mg	5296	79
				supplier	metallization	Silver (Ag)	7440-22-4		0.015	mg	3056	45
				supplier	metallization	Titanium (Ti)	7440-32-6		0.011	mg	2241	33
				supplier	metallization	Tungsten (W)	7440-33-7		0.131	mg	26686	397
				supplier	Passivation	Silicon Oxide	7631-86-9		0.028	mg	5704	85
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	611	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.043	mg	8759	130
Leadframe	M-004 Copper and its alloys	166.051	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.015	mg	3056	45
				supplier	alloy	Copper (Cu)	7440-50-8		164.729	mg	992039	499179
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	993	500
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	301	152
				supplier	metallization	Nickel (Ni)	7440-02-0		1.107	mg	6667	3355
Soft solder	Solder	5.853	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	5.414	mg	924996	16406
				supplier	solder	Tin (Sn)	7440-31-5		0.293	mg	50060	888
				supplier	solder	Silver (Ag)	7440-22-4		0.146	mg	24944	442
Bonding wires	M-011 Other inorganic materials	0.923	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.923	mg	1000000	2797
				supplier	mold compound	Silica, vitreous	60676-86-0		132.316	mg	874996	400958
Encapsulation	M-011 Other inorganic materials	151.219	mg	supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-bis	EC 413-900-7		6.049	mg	40002	18330
				supplier	mold compound	Epoxy Resin	25068-38-6		4.537	mg	30003	13748
				supplier	mold compound	phenol resin	29690-82-2		7.561	mg	50000	22912
				supplier	mold compound	Carbon black	1333-86-4		0.756	mg	4999	2291
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167