



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2019-08-02
<b>Company Unique ID</b>	NL 008751171B01		
<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**

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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
STD5N62K3	TQDP*TZ62B6V	A	994X	2019-08-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	330	mg	Each	ECOPACK2
	Comment			

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-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 28th June 2019			
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	0.04	Die	121
Lead	5.37	Soft solder	16279

QueryList : REACH-16th July 2019				
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	5.37	Soft solder	16279
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	5.37	Soft solder	954852

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TQDP*TZ6286V					
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	6.030	mg	supplier	die	Silicon (Si)	7440-21-3		5.910	mg	980100	17909
				supplier	metallization	Aluminium (Al)	7429-90-5		0.039	mg	6468	118
				supplier	Passivation	Silicon Oxide	7631-86-9		0.024	mg	3980	73
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	497	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	6633	121
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.014	mg	2322	42
Leadframe	M-004 Copper and its alloys	164.945	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.730	mg	998697	499182
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	500
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	303	152
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	5.372	mg	954852	16279
Soft solder	Solder	5.626	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.141	mg	25062	427
				supplier	solder	Tin (Sn)	7440-31-5		0.113	mg	20086	342
				supplier	wire	Aluminium (Al)	7429-90-5		0.547	mg	1000000	1658
Bonding wires	M-003 Aluminum and its alloys	0.547	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.547	mg	1000000	1658
				supplier	mold compound	Fused Silica	60676-86-0		129.796	mg	855006	393321
				supplier	mold compound	Phenol resin Novolak	26834-02-6		7.590	mg	49998	23000
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		7.590	mg	49998	23000
				supplier	mold compound	Poly Phenyl Glycidyl Ether co-Dicyclopentadiene	119345-05-0		5.313	mg	34998	16100
Encapsulation	M-011 Other inorganic materials	151.807	mg	supplier	mold compound	Benzaldehyde hydroxy polymer	106466-55-1		0.759	mg	5000	2300
				supplier	mold compound	Carbon black	1333-86-4		0.759	mg	5000	2300
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167