



## 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  * : Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2019-03-12
<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>	Rossana Bonaccorso	<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
STI55NF03L	TLI7*E33DB32	A	3068	2019-03-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	1500.00	mg	Each	ECOPACK1
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
SIP	4.5-10.2-10.55	2	Through-hole
Comment	I2PAK		

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 23rd November 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	0.12	Die - Leadframe	77
Lead	4.30	Soft solder	2865
Antimony trioxide	10.99	Mold compound	7327

QueryList : REACH-15th January 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	4.298	Soft solder	2865
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	4.30	Soft solder	954899

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TL17*E33D832					
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	4.741	mg	supplier	die	Silicon (Si)	7440-21-3		4.585	mg	967096	3057
				supplier	metallization	Aluminium (Al)	7429-90-5		0.089	mg	18772	59
				supplier	Passivation	Silicon Oxide	7631-86-9		0.025	mg	5273	17
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	422	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.027	mg	5695	18
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	422	1
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.011	mg	2320	7
				supplier	alloy	Copper (Cu)	7440-50-8		838.515	mg	998586	559010
Leadframe	M-004 Copper and its alloys	839.702	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.840	mg	1000	560
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.252	mg	300	168
				supplier	metallization	Nickel (Ni)	7440-02-0		0.088	mg	105	59
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	9	5
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.298	mg	954899	2865
Soft solder	Solder	4.501	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.298	mg	954899	2865
				supplier	solder	Silver (Ag)	7440-22-4		0.113	mg	25106	75
Bonding wires	M-011 Other inorganic materials	0.952	mg	supplier	solder	Tin (Sn)	7440-31-5		0.090	mg	19996	60
				supplier	wire	Aluminium (Al)	7429-90-5		0.948	mg	995798	634
				supplier	wire	Magnesium (Mg)	7439-95-4		0.004	mg	4201	3
Encapsulation	M-011 Other inorganic materials	646.199	mg	supplier	mold compound	Silica vitreous	60676-86-0		504.035	mg	780000	336023
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		61.389	mg	95000	40926
				supplier	mold compound	Phenol resin	9003-35-4		54.281	mg	84000	36187
				supplier	mold compound	Antimony Trioxide	1309-64-4		10.985	mg	16999	7323
				supplier	mold compound	Brominated flame retardant	Proprietary		9.693	mg	15000	6462
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.231	mg	5000	2154
				supplier	mold compound	Carbon Black	1333-86-4		2.585	mg	4001	1723
Connections coating	Solder	3.905	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.905	mg	1000000	2603