



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-02-20
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG MD Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

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		
Supplier Acceptance *	true	Legal Declaration *
		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
STB80NF55-06-1	TLI7*ED5JA62	A	3068	2019-02-20
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	0.21	Die - Leadframe	137
Lead	15.21	Soft solder	10139
Antimony trioxide	10.57	Encapsulation	7047

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	15.209	Soft solder	10139
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	15.209	Soft solder	954979

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TU7*ED5JA62					
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	17.851	mg	supplier	die	Silicon (Si)	7440-21-3		17.271	mg	967509	11514
				supplier	metallization	Aluminium (Al)	7429-90-5		0.336	mg	18822	224
				supplier	Passivation	Silicon Oxide	7631-86-9		0.093	mg	5210	62
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	449	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.025	mg	1400	17
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.118	mg	6610	79
Leadframe	M-004 Copper and its alloys	839.702	mg	supplier	alloy	Copper (Cu)	7440-50-8		838.515	mg	998586	559010
				supplier	alloy	Iron (Fe)	7439-89-6		0.840	mg	1000	560
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.252	mg	301	168
				supplier	metallization	Nickel (Ni)	7440-02-0		0.088	mg	105	59
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	8	5
				supplier	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	15.209	mg	954979
Soft solder	Solder	15.926	mg	supplier	solder	Silver (Ag)	7440-22-4		0.398	mg	24991	265
				supplier	solder	Tin (Sn)	7440-31-5		0.319	mg	20030	213
				supplier	wire	Aluminium (Al)	7429-90-5		0.948	mg	995798	632
Bonding wires	M-003 Aluminum and its alloys	0.952	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.004	mg	4202	3
				supplier	compound	Silica vitreous	60676-86-0		484.898	mg	780000	323265
Encapsulation	M-011 Other inorganic materials	621.664	mg	supplier	compound	Bisphenol F type epoxy resin	9003-36-5		59.058	mg	95000	39372
				supplier	compound	Phenol resin	9003-35-4		52.220	mg	84000	34813
				supplier	compound	Antimony Trioxide	1309-64-4		10.568	mg	17000	7045
				supplier	compound	Brominated flame retardant	Proprietary		9.325	mg	15000	6217
				supplier	compound	Silica Cristobalite	14464-46-1		3.108	mg	4999	2072
				supplier	compound	Carbon Black	1333-86-4		2.487	mg	4001	1658
connections coating	Solder	3.905	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.905	mg	1000000	2603