



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-02-15
Company Unique ID	NL 008751171801		
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 *	Rossana Bonaccorso	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


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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
STB60NF06LT4	T2D2*AL6FA62	A	3068	2019-02-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	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
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	gull wing	
Comment	D2PAK			

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	89
Lead	6.14	Soft solder	4450
Antimony trioxide	7.01	Mold compound	5080

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	6.141	Soft solder	4450
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	6.141	Soft solder	954906

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T2D2*AL6FA62									
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	6.950	mg	supplier	die	Silicon (Si)	7440-21-3		6.693	mg	963022	4850				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.130	mg	18705	94				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	143	1				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.061	mg	8777	44				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	432	2				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.046	mg	6619	33				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.016	mg	2302	12				
				supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	998592	563433				
Leadframe	M-004 Copper and its alloys	778.633	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.779	mg	1000	564				
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.234	mg	301	170				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.077	mg	99	56				
				supplier	metallization	Phosphorus (P)	7723-14-0		0.006	mg	8	4				
				Soft solder	Solder	6.431	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.141	mg	954906	4450
				supplier	solder	Silver (Ag)	7440-22-4		0.161	mg	25035	117				
supplier	solder	Tin (Sn)	7440-31-5		0.129	mg	20059	93								
Bonding wires	M-011 Other inorganic materials	1.710	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.703	mg	995906	1234				
				supplier	wire	Magnesium (Mg)	7439-95-4		0.007	mg	4094	5				
				Encapsulation	M-011 Other inorganic materials	583.787	mg	supplier	mold compound	Silica, vitreous	60676-86-0		470.532	mg	805999	340965
supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		40.865	mg	70000	29612								
supplier	mold compound	Phenol resin	9003-35-4		23.352	mg	40001	16922								
supplier	mold compound	Biphenyl epoxy resin	85954-11-6		35.027	mg	60000	25382								
supplier	mold compound	Antimony Trioxide	1309-64-4		7.005	mg	11999	5076								
supplier	mold compound	Brominated Epoxy Resin	40039-93-8		4.087	mg	7001	2962								
supplier	mold compound	Carbon black	1333-86-4		2.919	mg	5000	2115								
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804				