



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-05-13
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

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
STB100N10F7	T2D2*OD0FR52	A	3068	2020-05-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380	mg	Each	ECOPACK 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	245	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00271826	



Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.50	3	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 3rd January 2020			
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	0.15	die - leadframe	105
Lead	3.65	soft solder	2646

QueryList : REACH-16th January 2020				
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	3.65	Soft solder	2646
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	3.652	Soft solder	954771

Material Composition Declaration :						Mfr Item Name	T2D2*OD0FR52					
note : Substance present with less 0.001mg will not be declared in this document												
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	5.089	mg	supplier	die	Silicon(Si)	7440-21-3		4.882	mg	959324	3538
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.096	mg	18864	70
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.040	mg	7860	29
				supplier	metallisation	Silver(Ag)	7440-22-4		0.017	mg	3339	12
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	590	10
				supplier	metallisation	Vanadium(V)	7440-62-2		0.003	mg	590	2
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.001	mg	197	1
Leadframe	M-004 Copper and its alloys	778.660	mg	supplier	passivation	Silicon oxide	7631-86-9		0.047	mg	9236	34
				supplier	alloy & coating	Copper(Cu)	7440-50-8		777.532	mg	998551	563429
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.105	mg	135	76
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.358	mg	460	259
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.654	mg	840	474
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.011	mg	14	8
				SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	3.652	mg	954771	2646
Soft solder	Solder	3.825	mg	supplier	solder	Silver(Ag)	7440-22-4		0.096	mg	25098	70
				supplier	solder	Tin(Sn)	7440-31-5		0.077	mg	20131	56
Bonding wires	M-003 Aluminum and its alloys	2.894	mg	supplier	wire	Aluminium (Al)	7429-90-5		2.894	mg	1000000	2097
Bonding wires 2	M-003 Aluminum and its alloys	0.132	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.131	mg	992424	95
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	7576	1
Encapsulation	M-011 Other inorganic materials	586.911	mg	supplier	mold compound	Silica vitreous	60676-86-0		513.547	mg	875000	372136
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		23.476	mg	39999	17012
				supplier	mold compound	Epoxy type resin	proprietary		17.607	mg	29999	12759
				supplier	mold compound	Phenol type resin	proprietary		29.346	mg	50001	21265
				supplier	mold compound	Carbon black	1333-86-4		2.935	mg	5001	2127
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804