



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-06-15
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Rossana Bonaccorso
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
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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
STB140NF55T4	T2D2*MM5JB62	A	3068	2018-06-15
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK2	
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	 life.augmented	
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
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 25th May 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	0.19	Die - Leadframe	140
Lead	15.00	Soft solder	10868

QueryList : REACH-15th January 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T2D2*MM5/B62					
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	17.400	mg	supplier	die	Silicon (Si)	7440-21-3		17.023	mg	978333	12336
				supplier	metallization	Aluminium (Al)	7429-90-5		0.159	mg	9138	115
				supplier	Passivation	Silicon Oxide	7631-86-9		0.069	mg	3966	50
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	459	6
				supplier	back side metallization	Gold (Au)	7440-57-5		0.025	mg	1437	18
Leadframe	M-004 Copper and its alloys	778.633	mg	supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	998592	563433
				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	15.705	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	14.998	mg	954982	10868
				supplier	solder	Silver (Ag)	7440-22-4		0.393	mg	25024	284
				supplier	solder	Tin (Sn)	7440-31-5		0.314	mg	19994	228
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	564.063	mg	supplier	mold compound	Silica, vitreous	60676-86-0		493.555	mg	875000	357649
				supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-b	EC 413-900-7		22.563	mg	40001	16350
				supplier	mold compound	Epoxy Resin	25068-38-6		16.922	mg	30000	12262
				supplier	mold compound	phenol resin	29690-82-2		28.203	mg	50000	20437
				supplier	mold compound	Carbon black	1333-86-4		2.820	mg	4999	2043
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804