



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 *	2018-07-30
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	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		


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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STB155N3LH6	T2D2*6L3FA52	A	3068	2018-07-30
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		
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	0.12	Die - Leadframe	84
Lead	6.01	Soft solder	4352
Antimony trioxide	7.03	Mold compound	5094

QueryList : REACH-27th June 2018				
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	6.01	Soft solder	4352
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	6.01	Soft solder	955001

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T2D2*6L3FA52					
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	5.384	mg	supplier	die	Silicon (Si)	7440-21-3		5.223	mg	970102	3786
				supplier	metallization	Aluminium (Al)	7429-90-5		0.062	mg	11513	42
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	3157	12
				supplier	Passivation	Silicon Oxide	7631-86-9		0.027	mg	5014	20
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	558	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	1857	7
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.039	mg	7242	28
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	557	2
Leadframe	M-004 Copper and its alloys	778.632	mg	supplier	alloy	Copper (Cu)	7440-50-8		777.536	mg	998592	563432
				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	6.289	mg	SVHC	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.006	mg	955001	4352
				supplier	solder	Silver (Ag)	7440-22-4		0.157	mg	24964	114
				supplier	solder	Tin (Sn)	7440-31-5		0.126	mg	20035	91
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	585.496	mg	supplier	mold compound	Silica, vitreous	60676-86-0		471.908	mg	805997	341962
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		40.985	mg	70000	29699
				supplier	mold compound	Phenol resin	9003-35-4		23.420	mg	40000	16971
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		35.130	mg	60000	25457
				supplier	mold compound	Antimony Trioxide	1309-64-4		7.026	mg	12000	5094
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		4.099	mg	7002	2970
Connections coating	Solder	2.489	mg	supplier	mold compound	Carbon black	1333-86-4		2.928	mg	5001	2122
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804