



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 *	2019-03-21
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
2STF2360	CS39*BI06T6F	A	Z8GA	2019-03-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	59	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		 life.augmented
1	225	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.5 - 2.45 - 1.5	4	flat	
Comment	SOT 89			

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 26th October 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	0.01	Die	153
Lead	1.53	Soft solder	25966

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	1.53	Soft solder	25966
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	1.53	Soft solder	954517

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CS39*B106T6F					
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	1.149	mg	supplier	die	Silicon (Si)	7440-21-3		1.094	mg	952132	18542
				supplier	metallization	Aluminium (Al)	7429-90-5		0.017	mg	14795	288
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	5222	102
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	16536	322
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	871	17
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	2611	51
Leadframe	M-004 Copper and its alloys	33.980	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.009	mg	7833	153
				supplier	alloy	Copper(CU)	7440-50-8		33.731	mg	992672	571712
				supplier	alloy	Iron(Fe)	7439-89-6		0.035	mg	1030	593
				supplier	alloy	Phosphorus(P)	7723-14-0		0.011	mg	324	186
				supplier	metallization	Silver(Ag)	7440-22-4		0.203	mg	5974	3441
Soft solder	Solder	1.605	mg	supplier	solder	Silver(Ag)	7440-22-4		0.040	mg	24922	678
				supplier	solder	Tin(Sn)	7440-31-5		0.033	mg	20561	559
				JIG - R	solder	Lead (Pb)	7439-92-1	7a. Lead in high me	1.532	mg	954517	25966
Bonding wires	M-004 Copper and its alloys	0.133	mg	supplier	wire	Copper (Cu)	7440-50-8		0.133	mg	1000000	2254
Encapsulation	M-011 Other inorganic materials	20.885	mg	supplier	solder alloy	Biphenyl epoxy resin	85954-11-6		1.671	mg	80010	28322
				supplier	metallization	Phenol resin Novolak	26834-02-6		0.835	mg	39981	14153
				supplier	metallization	Silica, vitreous	60676-86-0		18.149	mg	868997	307610
				supplier	metallization	Carbon black	1333-86-4		0.105	mg	5027	1779
				supplier	metallization	Bismuth (Bi)	7440-69-9		0.125	mg	5985	2119
Connections coating	Solder	1.248	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.248	mg	1000000	21153