



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 *	2018-04-17
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 *	Legal Declaration *
true	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
STN2580	CSLL*BV81S6F	A	998G	2018-04-17
	Amount	UoM	Unit type	ST ECOPACK Grade
	110	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	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5-3.5-1.8	4	gull wing	
Comment	SOT 223			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : California Prop65 list, dated 15th December 2017			
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	0.02	Die	145
Lead	2.36	Soft solder	21409

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	CSLL*BV8156F					
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	2.695	mg	supplier	die	Silicon (Si)	7440-21-3		2.578	mg	956602	23445
				supplier	metallization	Aluminium (Al)	7429-90-5		0.060	mg	22255	545
				supplier	Passivation	Silicon Oxide	7631-86-9		0.034	mg	12611	309
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	371	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.016	mg	5935	145
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.006	mg	2226	55
Leadframe	M-004 Copper and its alloys	92.064	mg	supplier	alloy	Copper (Cu)	7440-50-8		91.456	mg	993396	831418
				supplier	alloy	Iron (Fe)	7439-89-6		0.092	mg	999	836
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.028	mg	304	255
				supplier	metallization	Silver (Ag)	7440-22-4		0.488	mg	5301	4436
Soft solder	Solder	2.466	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.355	mg	954988	21409
				supplier	solder	Silver (Ag)	7440-22-4		0.062	mg	25142	564
				supplier	solder	Tin (Sn)	7440-31-5		0.049	mg	19870	445
				supplier	wire	Copper (Cu)	7440-50-8		0.091	mg	1000000	820
Encapsulation	M-011 Other inorganic materials	9.922	mg	supplier	mold compound	Silica, vitreous	60676-86-0		8.621	mg	868877	78373
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.794	mg	80024	7218
				supplier	mold compound	Phenol Resin	26834-02-6		0.397	mg	40012	3609
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.060	mg	6047	545
				supplier	mold compound	Carbon black	1333-86-4		0.050	mg	5040	455
Connections coating	Solder	2.762	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.762	mg	1000000	25109