



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-02-20
Contact Name *	Refer to Supplier Comment section		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

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 omprehensive 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
ACST310-8B	BTDP*A6C038S	A	998G	2017-02-20
Amount	UoM	Unit type	ST ECOPACK Grade	
320.00	mg	Each	ECOPACK2	

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	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	Package: TO 252 DPAK; MDF valid also for ACST310-8BTR			

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)

Query : California Prop65 list, dated 27th January 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	53
Lead	2.10	soft solder	6572

QueryList : REACH-12th January 2017				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BTDPA6C0385					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	1.803	mg	supplier	die	Silicon (Si)	7440-21-3		1.675	mg	929005	5234
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	15530	88
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	4992	28
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.017	mg	9429	53
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.017	mg	9429	53
				supplier	back side metallization	Gold (Au)	7440-57-5		0.017	mg	9429	53
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	9429	53
				supplier	polymer die coating	Propimide	proprietary		0.023	mg	12757	72
Leadframe	Copper & its alloys	164.943	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.778	mg	999000	514931
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.165	mg	1000	516
Soft solder	Solder	2.202	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	2.103	mg	955041	6572
				supplier	solder	Silver (Ag)	7440-22-4		0.055	mg	24977	172
				supplier	solder	Tin (Sn)	7440-31-5		0.044	mg	19982	138
Bonding wires	Other inorganic materials	0.147	mg	supplier	wire	Copper (Cu)	7440-50-8		0.147	mg	1000000	459
Encapsulation	Other Organic Materials	149.860	mg	supplier	mold compound	Silica, vitreous	60676-86-0		134.499	mg	897498	420309
				supplier	mold compound	Epoxy resin	25068-38-6		10.490	mg	69999	32781
				supplier	mold compound	Phenol resin	29690-82-2		4.496	mg	30001	14050
				supplier	mold compound	carbon black	1333-86-4		0.375	mg	2502	1172
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266