



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 *	2019-05-03
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
SM6T250CAY	AHZG*TYB250E	A	64BA	2019-05-03
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	
SOJ	4.2-3.7-2.37	2	J bend	
Comment	SMB CLIP (SOD 6)			

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
8g	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages

QueryList : California Prop65 list, dated 8th March 2019			
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	0.09	Die - Leadframe	827
Lead	2.11	Soft solder	19191

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	2.11	Soft solder	19191
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	2.11	Soft solder	920227

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AHZG*TYB250E					
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	2.647	mg	supplier	die	Silicon (Si)	7440-21-3		2.523	mg	953011	22936
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	5666	136
				supplier	metallization	Gold (Au)	7440-57-5		0.011	mg	4155	100
				supplier	metallization	Nickel (Ni)	7440-02-0		0.011	mg	4155	100
				supplier	Passivation	Silicon Oxide	7631-86-9		0.014	mg	5288	127
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.010	mg	3777	91
				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1133	27
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.016	mg	6044	145
				supplier	polymer die coating	Durimide	Proprietary		0.044	mg	16771	404
				Leadframe	M-004 Copper and its alloys	40.744	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.041	mg	1006	373
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.012	mg	295	109
supplier	metallization	Nickel (Ni)	7440-02-0						0.064	mg	1571	582
supplier	metallization	Phosphorus (P)	7723-14-0						0.005	mg	122	45
supplier	metallization	Lead (Pb)	7439-92-1					7a-Lead in high met	2.111	mg	920227	19191
Soft solder	Solder	2.294	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	2.111	mg	920227	19191
				supplier	solder	Silver (Ag)	7440-22-4		0.057	mg	24847	518
				supplier	solder	Tin (Sn)	7440-31-5		0.114	mg	49695	1036
				supplier	solder	flux residue	Proprietary		0.012	mg	5231	109
				supplier	solder	flux residue	Proprietary		0.012	mg	5231	109
Encapsulation	M-011 Other inorganic materials	45.174	mg	supplier	mold compound	Amorphous Silica	7631-86-9		33.022	mg	730996	300200
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		8.583	mg	189999	78027
				supplier	mold compound	Phenol resin	9003-35-4		1.355	mg	29995	12318
				supplier	mold compound	Bisphenol A-bisphenol A diglycidyle ether poly	25036-25-3		1.355	mg	29995	12318
				supplier	mold compound	Carbon black	1333-86-4		0.407	mg	9009	3699
				supplier	mold compound	Triphenylphosphine	603-35-0		0.316	mg	6995	2873
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		0.136	mg	3011	1236
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.811	mg	1000000	7373
Connections coating	Solder	0.811	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.811	mg	1000000	7373
Clip		18.330	mg	supplier	alloy	Copper (Cu)	7440-50-8		18.330	mg	1000000	166636