



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-03-16
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

Legal Statement		
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>
		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
SM6T33CAY	AHZJ*TYB033D	A	ZA41	2020-03-16
Amount	UoM	Unit type	ST ECOPACK Grade	
98	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	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	3X3X0.9	2	J bend	
Comment	Package: SMB CLIP (SOD 6 NEW)			

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 3rd January 2020			
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	173
Lead	3.05	Soft solder	31143

QueryList : REACH-16th January 2020				
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	3.05	Soft solder	31143
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	3.05	Soft solder	925129

Material Composition Declaration :						Mfr Item Name	AHZJ*TYB033D					
note : Substance present with less 0.001mg will not be declared in this document												
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	1.626	mg	supplier	die	Silicon (Si)	7440-21-3		1.573	mg	967405	16051
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	5535	92
				supplier	metallization	Gold (Au)	7440-57-5		0.007	mg	4305	71
				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	4305	71
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	615	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1230	20
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	5535	92
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.006	mg	3690	61
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1230	20
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.010	mg	6150	102
Leadframe & Clip	Copper and its alloy	39.178	mg	Supplier	Alloy & metallization	Copper (Cu)	7440-50-8		39.158	mg	999490	399571
				Supplier	Alloy & metallization	Zinc (Zn)	7440-66-6		0.002	mg	51	20
				Supplier	Alloy & metallization	Iron (Fe)	7439-89-6		0.004	mg	102	41
				Supplier	Alloy & metallization	Phosphorus (P)	12185-10-3		0.014	mg	357	143
Die attach	Other organic material	3.299	mg	Supplier	soft solder	Silver (Ag)	7440-22-4		0.082	mg	24856	837
				Supplier	soft solder	Tin (Sn)	7440-31-5		0.165	mg	50015	1684
				Supplier	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.052	mg	925129	31143
Encapsulation	Other organic material	52.161	mg	Supplier	Molding Compound	silica fused	7631-86-9		38.599	mg	739997	393867
				Supplier	Molding Compound	silica quartz	14808-60-7		10.431	mg	199977	106439
				Supplier	Molding Compound	phenolic resin	9003-35-4		2.609	mg	50018	26622
				Supplier	Molding Compound	carbon black	1333-86-4		0.522	mg	10008	5329
Connection coating	Other inorganic material	1.736	mg	Supplier	Solder alloy	Tin (Sn)	7440-31-5		1.736	mg	1000000	17714