



## 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 <small>* : Required Field</small>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-11-16
<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**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**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
SM15T24CAY	AHZK*TYB024K	A	9941	2020-11-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	250	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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	CD00358745	



Package Designator	Size	Nbr of instances	Shape	
CHP	6.88,5.97,2.15	2	flat	
Comment	SMC CLIP (SOD 15 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 2020/363_ March 2020	
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	0.05	die	208
Lead	2.31	soft solder	9240

QueryList : REACH-25th June 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	2.31	Soft solder	9240
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	2.31	Soft solder	920319

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tin, Tungsten,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	AHZK*TYB024K					
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	5.160	mg	supplier	die	Silicon(Si)	7440-21-3		4.909	mg	951357	19636
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.047	mg	9109	188
				supplier	metallisation	Gold(Au)	7440-57-5		0.027	mg	5233	108
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.052	mg	10078	208
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	775	16
				supplier	metallisation	Tungsten(W)	7440-33-7		0.007	mg	1357	28
				supplier	passivation	Silicon oxide	7631-86-9		0.028	mg	5426	112
				supplier	polymer coating	Durimide	proprietary		0.086	mg	16667	344
Leadframe & clip	M-004 Copper and its alloys	88.531	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		88.488	mg	999514	353952
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.009	mg	102	36
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.030	mg	339	120
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.004	mg	45	16
Soft solder	Solder	2.510	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.310	mg	920319	9240
				supplier	solder	Tin(Sn)	7440-31-5		0.125	mg	49801	500
				supplier	solder	Silver(Ag)	7440-22-4		0.062	mg	24701	248
				supplier	solder	dry flux residue	proprietary		0.013	mg	5179	52
Encapsulation	M-011 Other inorganic materials	151.691	mg	supplier	mold compound	Amorphous silica	7631-86-9		134.247	mg	885003	536988
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		9.102	mg	60004	36408
				supplier	mold compound	Phenolic resin	9003-35-4		6.826	mg	44999	27304
				supplier	mold compound	Carbon black	1333-86-4		0.607	mg	4002	2428
				supplier	mold compound	Magnesium oxide	1309-48-4		0.303	mg	1997	1212
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.303	mg	1997	1212
connections coating	Solder	2.108	mg	supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		0.303	mg	1997	1212
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.108	mg	1000000	8432