



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-07-07</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<b>giovanni giacopello</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<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**

**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
SMA6F154AY	AHC5*YFU181G	A	64BA	2020-07-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	39	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	DM00470198	



Package Designator	Size	Nbr of instances	Shape	
CHP	4.20,2.80,0.98	2	Flat	
Comment	SMA Flat 2 Leads No exposed pad			

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	487
Lead	0.88	soft solder	22564

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	0.88	Soft solder	22564
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	0.88	Soft solder	919540

Material Composition Declaration :						Mfr Item Name	AHC5*YFU181G					
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	1.519	mg	supplier	die	Silicon(Si)	7440-21-3		1.432	mg	942726	36718
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.017	mg	11192	436
				supplier	metallisation	Gold(Au)	7440-57-5		0.009	mg	5925	231
				supplier	metallisation	Nicke(Ni)	7440-02-0		0.019	mg	12508	487
				supplier	passivation	Silicon oxide	7631-86-9		0.010	mg	6583	256
Leadframe	M-004 Copper and its alloys	15.129	mg	supplier	polymer coating	Durimide	proprietary		0.032	mg	21066	821
				supplier	alloy & coating	Copper(Cu)	7440-50-8		15.109	mg	998678	387410
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.007	mg	463	179
Soft solder	Solder	0.957	mg	SVHC	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.013	mg	859	333
				supplier	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	0.880	mg	919540	22564
				supplier	solder	Tin(Sn)	7440-31-5		0.048	mg	50157	1231
				supplier	solder	Silver(Ag)	7440-22-4		0.024	mg	25078	615
Encapsulation	M-011 Other inorganic materials	21.242	mg	supplier	solder	dry flux residue	proprietary		0.005	mg	5225	128
				supplier	mold compound	Amorphous silica	7631-86-9		18.798	mg	884945	482000
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		1.274	mg	59976	32667
				supplier	mold compound	Phenolic resin	9003-35-4		0.956	mg	45005	24513
				supplier	mold compound	Carbon black	1333-86-4		0.085	mg	4002	2179
				supplier	mold compound	Magnesium oxide	1309-48-4		0.043	mg	2024	1103
connections coating	Solder	0.153	mg	supplier	mold compound	Aluminium hydroxide	21645-51-2		0.043	mg	2024	1103
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		0.043	mg	2024	1103
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.153	mg	1000000	3923