



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2021-09-13
<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 Material Declaration 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

**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
SCT016H120G3AG	T38P*BRJNAV2	A	3068	2021-09-13
	Amount	UoM	Unit type	ST ECOPACK Grade
	1540	mg	Each	ECOPACK 1
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	245	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00812528	

Package Designator	Package Size	Nbr of instances	Shape	
Not Applicable	10.20,9.15,4.50	7	0	
Comment	H2PAK-7			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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	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 19th March 2021			
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	1.54	die - leadframe	1001
Lead	8.11	soft solder	5264
Antimony trioxide	5.70	encapsulation	3701

QueryList : REACH-8th July 2021				
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	8.11	Soft solder	5264
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	8.11	Soft solder	955001

QueryList : 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 in the component :	Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T38P*BRJNAV2					
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	14.667	mg	supplier	die	Silicium carbide	409-21-2		13.851	mg	944366	8994
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.242	mg	16500	157
				supplier	metallisation	Copper(Cu)	7440-50-8		0.034	mg	2318	22
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.216	mg	14727	140
				supplier	metallisation	Silver(Ag)	7440-22-4		0.223	mg	15204	145
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.035	mg	2386	23
				supplier	metallisation	Vanadium(V)	7440-62-2		0.007	mg	477	5
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.040	mg	2727	26
				supplier	passivation	Silicon oxide	7631-86-9		0.019	mg	1295	12
Leadframe	M-004 Copper and its alloys	1031.156	mg	supplier	alloy	Copper(Cu)	7440-50-8		1028.454	mg	997379	667827
				supplier	alloy	Iron phosphide	26508-33-8		0.865	mg	839	562
				supplier	alloy	Iron(Fe)	7439-89-6		0.474	mg	460	308
				supplier	metallization	Nickel (Ni)	7440-02-0		1.325	mg	1285	860
				supplier	metallization	Phosphorus (P)	7723-14-0		0.038	mg	37	25
Soft solder	Solder	8.489	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	8.107	mg	955001	5264
				supplier	solder	Silver(Ag)	7440-22-4		0.212	mg	24973	138
				supplier	solder	Tin(Sn)	7440-31-5		0.170	mg	20026	110
Bonding wires	M-003 Aluminum and its alloys	7.837	mg	supplier	wire	Aluminium (Al)	7429-90-5		7.837	mg	1000000	5089
Bonding wires 2	M-003 Aluminum and its alloys	0.603	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.603	mg	1000000	392
Encapsulation	M-011 Other inorganic materials	474.972	mg	supplier	mold compound	Silica vitreous	60676-86-0		390.902	mg	823000	253832
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		33.248	mg	70000	21590
				supplier	mold compound	Phenol resin	9003-35-4		18.999	mg	40000	12337
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		14.249	mg	30000	9253
				supplier	mold compound	Antimony trioxide	1309-64-4		5.700	mg	12001	3701
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		9.499	mg	19999	6168
				supplier	mold compound	Carbon black	1333-86-4		2.375	mg	5000	1542
Connections coating	Solder	2.276	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.276	mg	1000000	1478