



## Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D *: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2022-05-20
Company Unique ID	NL 008751171B01		
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 *	giovanni giacopello	Representative Title	ADG Material Declaration champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	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
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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
SCT027H65G3AG	T38P*BRF9AV2	A	3068	2022-05-20
	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	DM00861456	

Package Designator	Package Size	Nbr of instances	Shape	
Not Applicable	10.20x9.15x4.50	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
8(e)	8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 17th Dec 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	1.412	die - leadframe	917	
Lead	3.334	soft solder	2165	
Antimony trioxide	5.940	encapsulation	3857	

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GB 26572 – 2014				
Query				Response
1- Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				true
2- Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				false
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
Soft solder				
Homogeneous Material(s) containing Lead				

QueryList : REACH-17 Jan 2022				
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	3.33	Soft solder	2165
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	3.33	Soft solder	955027

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 .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	
Query	Response
The Product does contain at least one of the substances listed in Chemical Control Act	true

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	
Query	Response
The product contains adhesives identified under GB 33372	false

Stockholm Convention Persistent Organic Pollutants	
Query	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	T38P*BRF9AV2					
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	5.985	mg	supplier	die	Silicium carbide	409-21-2		5.547	mg	928817	3601
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.101	mg	16876	66
				supplier	metallisation	Silicon(Si)	7440-21-3		0.024	mg	4010	16
				supplier	metallisation	Copper(Cu)	7440-50-8		0.014	mg	2339	9
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.087	mg	14536	56
				supplier	metallisation	Silver(Ag)	7440-22-4		0.089	mg	14871	58
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.011	mg	1838	7
				supplier	metallisation	Vanadium(V)	7440-62-2		0.003	mg	501	2
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.016	mg	2673	10
				supplier	passivation	Silicon oxide	7631-86-9		0.027	mg	4511	18
				supplier	polymer coating	polyimide	proprietary		0.066	mg	11028	43
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	3.491	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	3.334	mg	955027	2165
				supplier	solder	Silver(Ag)	7440-22-4		0.087	mg	24921	56
				supplier	solder	Tin(Sn)	7440-31-5		0.070	mg	20052	45
				supplier	wire	Aluminium (Al)	7429-90-5		1.915	mg	1000000	1244
Bonding wires	M-003 Aluminum and its alloys	1.915	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.238	mg	995816	155
Bonding wires 2	M-003 Aluminum and its alloys	0.239	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	4184	1
Encapsulation	M-011 Other inorganic materials	494.958	mg	supplier	mold compound	Silica vitreous	60676-86-0		407.350	mg	822999	264513
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		34.647	mg	70000	22498
				supplier	mold compound	Phenol resin	9003-35-4		19.798	mg	39999	12856
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		14.849	mg	30001	9642
				supplier	mold compound	Antimony trioxide	1309-64-4		5.940	mg	12001	3857
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		9.899	mg	20000	6428
				supplier	mold compound	Carbon black	1333-86-4		2.475	mg	5000	1607
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.256	mg	1000000	1465
Connections coating	Solder	2.256	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.256	mg	1000000	1465