



## Materials Declaration Form

<b>IPC</b>	1752	<b>Version</b>	2
<b>Form Type *</b>	Distribute		
<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>	2022-08-09
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section		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**


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
STTH2003CGY-TR	CSD2*878K1BG	A	3068	2022-08-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380	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	CD00320721	

Package Designator	Package Size	Nbr of instances	Shape	
SIP	10.20x9.15x4.50	3	Gull wing	
Comment	D2PAK			

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	1.040	die - leadframe	754
Lead	5.166	soft solder	3743
Antimony trioxide	6.896	encapsulation	4997

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 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	5.17	Soft solder	3743
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	5.17	Soft solder	955075

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 is 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	CSD2*878K1BG					
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	13.672	mg	supplier	die	Silicon(Si)	7440-21-3		13.309	mg	973449	9644
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.231	mg	16896	167
				supplier	passivation	Silicon oxide	7631-86-9		0.132	mg	9655	96
Leadframe	M-004 Copper and its alloys	779.614	mg	supplier	alloy	Copper(Cu)	7440-50-8		777.532	mg	997330	563429
				supplier	alloy	Iron phosphide	26508-33-8		0.654	mg	839	474
				supplier	alloy	Iron(Fe)	7439-89-6		0.358	mg	459	259
				supplier	metallization	Nickel (Ni)	7440-02-0		1.040	mg	1334	754
				supplier	metallization	Phosphorus (P)	7723-14-0		0.030	mg	38	22
Soft solder	Solder	5.409	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	5.166	mg	955075	3743
				supplier	solder	Silver(Ag)	7440-22-4		0.135	mg	24958	98
				supplier	solder	Tin(Sn)	7440-31-5		0.108	mg	19967	78
Bonding Ribbons	M-003 Aluminum and its alloys	4.180	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		4.180	mg	1000000	3029
Encapsulation	M-011 Other inorganic materials	574.636	mg	supplier	mold compound	Silica vitreous	60676-86-0		472.925	mg	822999	342699
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		40.225	mg	70001	29149
				supplier	mold compound	Phenol resin	9003-35-4		22.985	mg	39999	16656
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		17.239	mg	30000	12492
				supplier	mold compound	Antimony trioxide	1309-64-4		6.896	mg	12001	4997
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		11.493	mg	20000	8328
				supplier	mold compound	Carbon black	1333-86-4		2.873	mg	5000	2082
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804