



## Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2023-04-04
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*	Antonella Lanzafame	Representative title	AMSMaterial 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
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	Manufacturing site	date
STM6822YAWY6F	DZWY*56VA7YT	A	ZS1A	2023-04-04
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	16	mg	Each	ECOPACK® 3

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
1	220	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	,

Package designator	Package size	Number of instances	Shape	
SOT	2.9 x 1.6	5	0	
Comment				
Comment	WY SOT 23-5			



QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015		Response
1 - Product(s) meets EU RoHS requirement without any exemptions		true
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)		false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions		false
Exemption Id.	Description	

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020		Response
1 - Product(s) meets EU ELV requirements without any exemptions		true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)		false
Exemption Id.	Description	

QueryList : California Prop65 list, dated 27th Jan 2023			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			true
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			false
Substance	amount in product (mg)	Application	ppm in product
Antimony trioxide	0.000	alloy	0

QueryList : REACH-17th Jan 2023				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
,	#N/A			
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material

QueryList : Responsible metals sourcing		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 :		<b>Gold,</b>

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

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

Stockholm Convention Persistent Organic Pollutants		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	DZWY*56VA7YT		16.0000		6000001.0	1000004.0
Homogeneous material	Material group	Mass	Unit of measure	Level	Substance category	Substance	CAS	Exempt	Mass	Unit of measure	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.562	mg	supplier	die	Silicon(Si)	7440-21-3		0.551	mg	980427	34438
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.002	mg	3559	125
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	1779	63
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	3559	125
				supplier	passivation	Silicon oxide	7631-86-9		0.006	mg	10676	375
Leadframe	M-004 Copper and its alloys	6.893	mg	supplier	alloy	Iron	7439-89-6		0.153	mg	22196	9563
				supplier	alloy	Copper	7440-50-8		6.661	mg	966343	416313
				supplier	alloy	Phosphorus	7723-14-0		0.002	mg	290	125
				supplier	alloy	Zinc	7440-66-6		0.010	mg	1451	625
Die attach	M-011 Other inorganic materials	0.072	mg	supplier	glue	Silver	7440-22-4		0.067	mg	9720	4188
				supplier	glue	Epoxy resin	Proprietary		0.058	mg	805556	3625
				supplier	glue	Aromatic amine	Proprietary		0.010	mg	138889	625
Bonding wires	M-008 Precious metals	0.144	mg	supplier	wire	Gold (Au)	7440-57-5		0.004	mg	55556	250
				supplier	wire	Gold (Au)	7440-57-5		0.144	mg	1000000	9000
Encapsulation	M-011 Other inorganic materials	7.668	mg	supplier	Mold compound	Solid Epoxy Resin-1 (0.1-11%)	Proprietary		0.063	mg	8263	3960
				supplier	Mold compound	Solid Epoxy Resin-2 (0.1-11%)	Proprietary		0.063	mg	8263	3960
				supplier	Mold compound	Phenol resin (2-12%)	Proprietary		0.227	mg	29567	14170
				supplier	Mold compound	Amorphous Silica (85-95%)	60676-86-0		7.070	mg	921951	441845
				supplier	Mold compound	Carbon Black (<1%)	1333-86-4		0.041	mg	5326	2553
Connections coating	Solder	0.661	mg	supplier	Mold compound	Crystalline silica (less than 5%)	14808-60-7		0.204	mg	26630	12763
				supplier	solder alloy	Sn	7440-31-5		0.661	mg	1000000	41313