



## 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*	2024-08-22
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*	Floriana SAN BIAGIO	Representative title	APMS 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
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
	EBE3*UBBJACY	B	9998-ZY1A	2024-08-22
Amount	Unit of measure	Unit type	ST ECOPACK grade	
28	mg	Each	ECOPACK® 3	

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
1	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
DSO	3 x 3	8	Gull wing	
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF is valid for TSC2010IYST			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	Response
<b>QUERY</b>	<b>Response</b>
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 17th Nov 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
Nickel	0.000		0
Lead	0.000		0
Lead-Borate Glass	0.000		0
Lead Zirconate Titanate	0.000		0
Antimony trioxide	0.000		0
Bisphenol A	0.000		0

QueryList : REACH-27th June 2024	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
,				
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, Tin,</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	true
<b>All the adhesive impacted complies with GB 33372</b>	<b>true</b>

QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true

QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	False

PFAS/PTFE Declaration	Response
The product is containing at least one of the following PFAS substance: Polytetrafluoroethylene, Thiophenium, Triphenylsulfonium nonaflate, Trifluoroacetic anhydride	False

BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True

Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True

Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EBE3*UBBJACY		27.9990		6000914.0	999999.0
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	2.242	mg	supplier	die	Silicon(Si)	7440-21-3		2.135	mg	952275	76250
				supplier	metallisation	Aluminium(AI)	7429-90-5		0.021	mg	9367	750
				supplier	metallisation	Copper(Cu)	7440-50-8		0.004	mg	1784	143
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	446	36
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	2676	214
				supplier	passivation	Silicon oxide	7631-86-9		0.052	mg	23194	1857
				supplier	polymer coating	polyimide	proprietary		0.023	mg	10259	821
				supplier	alloy	Copper (Cu)	7440-50-8		11.217	mg	968351	400621
Leadframe	M-004 Copper and its alloys	11.584	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.270	mg	23340	9656
				supplier	alloy	Zinc (Zn)	7440-66-6		0.014	mg	1209	493
				supplier	alloy	Metallic Phosphorus (P)	7723-14-0		0.003	mg	1192	123
				supplier	metallization	Silver (Ag)	7440-22-4		0.079	mg	6820	2821
				supplier	glue	Silver(Ag)	7440-22-4		0.272	mg	802360	9714
Die attach	M-015 Other organic materials	0.339	mg	supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.027	mg	79646	964
				supplier	glue	Epoxy resin	68475-94-5		0.010	mg	29499	357
				supplier	glue	Diglycidyl phenyl allyl ether	EC417-470-1		0.010	mg	29499	357
				supplier	glue	Other	proprietary		0.010	mg	29499	357
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.010	mg	29499	357
				supplier	wire	Gold (Au)	7440-57-5		0.157	mg	990500	5625
Bonding wires	M-008 Precious metals	0.159	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9500	54
Encapsulation	M-015 Other organic materials	13.101	mg	supplier	mold compound	Epoxy Resin	Proprietary		0.669	mg	51099	23909
				supplier	mold compound	Phenol Resin	Proprietary		0.669	mg	51099	23909
				supplier	mold compound	Silica Amorphous A (SiO2)	60676-86-0		9.754	mg	744504	348348
				supplier	mold compound	Silica Amorphous B (SiO2)	7631-86-9		1.995	mg	152275	71249
				supplier	mold compound	Carbon Black	1333-86-4		0.013	mg	1022	478
Connections coating	Solder	0.575	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.575	mg	1000000	20536