



Material declaration form

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

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2023-11-22
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*	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 : http://www.st.com/web/en/support/support.html		

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
TSC2001YDT	3DO7*US5P3BY	A	BO2A	2023-11-22
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	80	mg	Each	ECOPACK® 3
Identity	Authority			
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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	0	Copper Alloy		0
Package designator	Package size	Number of instances	Shape	
DSO	4.9 x 6	8	Gull wing	
Comment				
Comment	07 SO 08 .15 JEDEC			

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 11th Aug 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

QueryList :Customer		Response
QUERY		Response

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014					Response
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					false
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
Hazardous substance					
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE	
0	0	0	0	0	

QueryList : REACH-14th June 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 :	Gold, Tin,

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
All the adhesive impacted complies with GB 33372	true

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

QueryList : EUSRR Directive	Response
Product contains hazardous materials listed in EUSRR Annex II	False

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

BPA Restriction	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	3D07*US5P3BY		80.0000		6000001.0	1000008.0
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	1.804	mg	supplier	die	Silicon(Si)	7440-21-3		1.717	mg	951774	21463
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.017	mg	9424	213
				supplier	metallisation	Copper(Cu)	7440-50-8		0.003	mg	1663	38
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	554	13
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.005	mg	2772	63
				supplier	passivation	Silicon oxide	7631-86-9		0.042	mg	23282	525
				supplier	polymer coating	polyimide	proprietary		0.019	mg	10532	238
				supplier	alloy	Copper(Cu)	7440-50-8		29.123	mg	954477	364038
Leadframe	M-004 Copper and its alloys	30.512	mg	supplier	alloy	Iron(Fe)	7439-89-6		0.685	mg	22450	8563
				supplier	alloy	Iron phosphide	1310-43-6		0.041	mg	1344	513
				supplier	alloy	Zinc(Zn)	7440-66-6		0.036	mg	1180	450
				supplier	metallization	Silver (Ag)	7440-22-4		0.627	mg	20549	7838
				supplier	glue	Silver(Ag)	7440-22-4	0	0.223	mg	877953	2788
Die attach	M-011 Other inorganic materials	0.254	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.013	mg	51181	163
				supplier	glue	Isobornyl acrylate	5888-33-5		0.013	mg	51181	163
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.005	mg	19685	63
				supplier	wire	Gold(Au)	7440-57-5		0.154	mg	1000000	1925
Bonding wires	M-008 Precious metals	0.154	mg	supplier	wire	Gold(Au)	7440-57-5		0.154	mg	1000000	1925
				supplier	silica	Silica vitreous	60676-86-0		33.335	mg	715989	416688
Encapsulation	M-011 Other inorganic materials	46.558	mg	supplier	mold compound	Silicon oxide	7631-86-9		6.984	mg	150006	87300
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.492	mg	75003	43650
				supplier	mold compound	Phenol resin	26834-02-6		2.328	mg	50002	29100
				supplier	mold compound	Carbon black	1333-86-4		0.233	mg	5005	2913
				supplier	mold compound	Bismuth compound	7440-69-9		0.186	mg	3995	2325
Connections coating	Solder	0.718	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.718	mg	1000000	8975