



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*	2025-04-01
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	APMSMaterial 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
TSB951IYLT	BHWY*UBI4AAAY	A	Z3UA	2025-04-01
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	16.38	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	Tin (Sn), matte, annealed	Copper Alloy	0

Package designator	Package size	Number of instances	Shape
SOT	2.9x1.6	5	gull wing
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 3rd January 2025	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	0.000	alloy	0

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-21st January 2025	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 :	Tin, Tungsten,

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

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	True
The material present in the product is:	Lead

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	BHWY*UBI4AAY			16.3799	6000002.0	999997.0
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 or Dies or Wafer (choose)	M-011 Other inorganic materials	0.531	mg	supplier	die	Silicon(Si)	7440-21-3		0.501	mg	943503	30586
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.007	mg	13183	427
				supplier	metallisation	Copper(Cu)	7440-50-8		0.001	mg	1883	61
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	1883	61
				supplier	passivation	Silicon oxide	7631-86-9		0.013	mg	24482	794
				supplier	polymer coating	polyimide	proprietary		0.008	mg	15066	488
Leadframe	M-004 Copper and its alloys	7.220	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.983	mg	967175	426313
				supplier	alloy	Iron (Fe)	7439-89-6		0.168	mg	23269	10256
				supplier	alloy	Phosphorus (P)	7723-14-0		0.009	mg	1247	549
				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1662	733
				supplier	SVHC	Lead (Pb)	7439-92-1		0.001	mg	139	61
				supplier	alloy	Silver (Ag)	7440-22-4		0.047	mg	6510	2869
Die attach	M-011 Other inorganic materials	0.041	mg	supplier	glue	Silver	7440-22-4	0.8	0.033	mg	800000	2002
				supplier	glue	Acrylic resin	proprietary	0.08	0.003	mg	80000	200
				supplier	glue	Polybutadiene	proprietary	0.04	0.002	mg	40000	100
				supplier	glue	Acrylate	proprietary	0.04	0.002	mg	40000	100
				supplier	glue	Epoxy Resin	proprietary	0.015	0.001	mg	15000	38
				supplier	glue	Butadiene copo	proprietary	0.01	0.0004	mg	10000	25
				supplier	glue	Additive	proprietary	0.01	0.0004	mg	10000	25
				supplier	glue	Peroxide	proprietary	0.005	0.0002	mg	5000	13
Bonding wires	M-008 Precious metals	0.025	mg	supplier	wire	Au	7440-57-5	0.9905	0.025	mg	990500	1512
				supplier	wire	Pt	7440-06-4	0.007	0.0002	mg	7000	11
				supplier	wire	Pd	7440-05-3	0.0025	0.0001	mg	2500	4
Encapsulation	M-011 Other inorganic materials	8.055	mg	supplier	mold compound	Epoxy Resin 1	proprietary	0.045	0.362	mg	45000	22129
				supplier	mold compound	Epoxy Resin 2	proprietary	0.025	0.201	mg	25000	12294
				supplier	mold compound	Phenolic Resin	proprietary	0.05	0.403	mg	50000	24588
				supplier	mold compound	Organic Phosp	proprietary	0.003	0.024	mg	3000	1475
				supplier	mold compound	Carbon Black	1333-86-4	0.002	0.016	mg	2000	984
				supplier	mold compound	Amorphous silic	60676-86-0	0.775	6.243	mg	775000	381113
				supplier	mold compound	Amorphous silic	7631-86-9	0.1	0.806	mg	100000	49176
Connections coating	Solder	0.508	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		0.508	mg	1000000	31010