



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*	2024-05-22
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 : 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
	HYWY*VB4MAAY	A	9992-ZS1A	2024-05-22
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	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
SOT	2.9 x 1.6	5	gull wing	
Comment	WY SOT 23-5; MDF is valid for TSV7811YLT			

QueryList : RoHS Directive 2011/65/EU - 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015		Response
QUERY		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 : California Prop65 list, dated 29th December 2023			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	0.087	alloy	5311
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-23rd January 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
,	0			
,	0			
,	0			
,	0			
,	0			
,	0			
,	0			
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
,	0		,	
,	0		,	
,	0		,	
,	0		,	
,	0		,	
,	0		,	
,	0		,	



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, 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

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 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	HWY*VB4MAAY		16.3795		4999914.0	999966.0
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	0.674	mg	supplier	die	Silicon(Si)	7440-21-3		0.645	mg	956973	39377
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	8902	366
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	1484	61
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	1484	61
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	2967	122
				supplier	passivation	Silicon oxide	7631-86-9		0.011	mg	16320	672
				supplier	polymer coating	polyimide	proprietary		0.008	mg	11869	488
				supplier	alloy	Copper(Cu)	7440-50-8		7.000	mg	962512	427350
Leadframe	M-004 Copper and its alloys	7.273	mg	supplier	alloy	Zinc(Zn)	7440-66-6		0.007	mg	963	427
				supplier	alloy	Iron (Fe)	7439-89-6		0.167	mg	22963	10195
				supplier	alloy	Phosphorus (P)	7723-14-0		0.005	mg	688	305
				supplier	metallization	Nickel (Ni)	7440-02-0		0.087	mg	11963	5311
				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	275	122
				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	550	244
				supplier	glue	Silver(Ag)	7440-22-4		0.049	mg	830000	2964
Die attach	M-015 Other organic materials	0.059	mg	supplier	glue	Bismaleimide resin	35325-39-4		0.009	mg	150000	536
				supplier	glue	Further additives	proprietary		0.001	mg	20000	71
				supplier	wire	Gold(Au)	7440-57-5		0.083	mg	1000000	5067
Bonding wires	M-008 Precious metals	0.083	mg	supplier	wire	Gold(Au)	7440-57-5		0.083	mg	1000000	5067
Encapsulation	M-015 Other organic materials	8.292	mg	supplier	mold compound	Solid Epoxy Resin-1	29690-82-2		0.161	mg	19450	9846
				supplier	mold compound	Solid Epoxy Resin-2	Proprietary		0.161	mg	19450	9846
				supplier	mold compound	Phenol resin	25068-38-6		0.323	mg	38900	19692
				supplier	mold compound	Amorphous Silica	60676-86-0		7.405	mg	893025	452073
				supplier	mold compound	Carbon Black	1333-86-4		0.040	mg	4863	2462
supplier	mold compound	Crystalline silica	14808-60-7		0.202	mg	24313	12308				