



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*	2024-03-28
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*	giovanni giacopello	Representative title	ADGMaterial 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
STGWA50H65DFB2	TDWT*JWF5D8F	A	998G	2024-03-28
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	6100.00	mg	Each	ECOPACK® 2
Identity	Authority			
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
Not Applicable	Not Applicable	,		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01030424	
Package designator	Package size	Number of instances	Shape	
SIP	15.80x21.00x5.00	3	Through-hole	
Comment	TO-247 LONG LEADS			



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 25th Feb 2022				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	26.784	die - leadframe	4391	

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
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, 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 Restriction		Response
Product contains Per- and Polyfluorinated Substance		False

BPA Restriction		Response
Product contains Bisphenol A (Isopropylidenediphenol)		False



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TDWT*JWF5D8F									
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)				
Dies	M-011 Other inorganic materials	11.850	mg	supplier	die	Silicon(Si)	7440-21-3		10.790	mg	910548	1767				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.403	mg	34008	66				
				supplier	metallisation	Gold(Au)	7440-57-5		0.025	mg	2110	4				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.226	mg	19072	37				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.110	mg	9283	18				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.023	mg	1941	4				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.094	mg	7932	15				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	422	1				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.004	mg	338	1				
				supplier	passivation	Silicon oxide	7631-86-9		0.092	mg	7764	15				
				supplier	polymer coating	Durimide	proprietary		0.078	mg	6582	13				
				Leadframe	M-004 Copper and its alloys	4056.277	mg	supplier	alloy	Copper(Cu)	7440-50-8		4022.317	mg	991628	659396
								supplier	alloy	Iron phosphide	26508-33-8		3.383	mg	834	555
supplier	alloy	Iron(Fe)	7439-89-6						1.853	mg	457	304				
supplier	metallization	Nickel (Ni)	7440-02-0						26.558	mg	6547	4354				
supplier	metallization	Phosphorus (P)	7723-14-0						2.166	mg	534	355				
Soft solder	Solder	7.247	mg	supplier	solder	Tin(Sn)	7440-31-5		4.710	mg	649925	772				
				supplier	solder	Silver(Ag)	7440-22-4		1.812	mg	250034	297				
				supplier	solder	Antimony (Sb)	7440-36-0		0.725	mg	100041	119				
Bonding wires	M-003 Aluminum and its alloys	4.925	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.925	mg	1000000	807				
Bonding wires 2	M-003 Aluminum and its alloys	0.162	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.162	mg	1000000	27				
Encapsulation	M-011 Other inorganic materials	2013.342	mg	supplier	mold compound	Silica vitreous	60676-86-0		1530.140	mg	760000	250843				
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		312.068	mg	155000	51159				
				supplier	mold compound	Phenolic resin	9003-35-4		60.400	mg	30000	9902				
				supplier	mold compound	Metal hydroxide	21645-51-2		100.667	mg	50000	16503				
				supplier	mold compound	Carbon black	1333-86-4		10.067	mg	5000	1650				
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1016				