



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*	2023-06-05
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
L99H02QF	A55V*UH49AF6	A	959	2023-06-05
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	180.00	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		
3	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM00442179	
Package designator	Package size	Number of instances	Shape	
QFP	7.00x7.00x1.40	32	Gull wing	
Comment	LQFP 32 7x7x1.4 1. MDF valid for CPs: L99H02QF,L99H02QFTR			



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	2.839	die - leadframe	15772

QueryList : REACH-17 Jan 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
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,

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

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



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A55V*UH49AF6					
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	18.381	mg	supplier	die	Silicon(Si)	7440-21-3		9.174	mg	499101	50968
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.078	mg	4244	433
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.005	mg	272	28
				supplier	metallisation	Gold(Au)	7440-57-5		0.014	mg	762	78
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.047	mg	2557	261
				supplier	metallisation	Titanium(Ti)	7440-32-6		8.802	mg	478864	48900
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.015	mg	816	83
				supplier	passivation	Silicon oxide	7631-86-9		0.175	mg	9521	972
				supplier	polymer coating	polyimide	proprietary		0.071	mg	3863	394
				supplier	alloy	Copper(Cu)	7440-50-8		55.516	mg	942596	308422
Leadframe	M-004 Copper and its alloys	58.897	mg	supplier	alloy	Nickel(Ni)	7440-02-0		1.731	mg	29390	9617
				supplier	alloy	Silicium (Si)	7440-21-3		0.375	mg	6367	2083
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.087	mg	1477	483
				supplier	metallization	Nickel (Ni)	7440-02-0		1.061	mg	18014	5894
				supplier	metallization	Palladium (Pd)	7440-05-3		0.127	mg	2156	706
				supplier	glue	Silver(Ag)	7440-22-4		1.045	mg	844786	5806
Die attach	M-011 Other inorganic materials	1.237	mg	supplier	glue	Bismaleimide resin	proprietary		0.168	mg	135812	933
				supplier	glue	Additives	proprietary		0.024	mg	19402	133
				supplier	wire	Gold(Au)	7440-57-5		0.644	mg	1000000	3578
Bonding wires	M-008 Precious metals	0.644	mg	supplier	wire	Gold(Au)	7440-57-5		0.644	mg	1000000	3578
Encapsulation	M-011 Other inorganic materials	100.841	mg	supplier	mold compound	Silica vitreous	60676-86-0		74.169	mg	735504	412050
				supplier	mold compound	Silicon oxide	7631-86-9		15.126	mg	149999	84033
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		7.563	mg	74999	42017
				supplier	mold compound	Phenol resin	26834-02-6		3.025	mg	29998	16806
				supplier	mold compound	Carbon black	1333-86-4		0.555	mg	5504	3083
supplier	mold compound	Bismuth compound	7440-69-9		0.403	mg	3996	2239				