



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*	2024-02-27
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*	MDG CHAMPION	Representative title	MDGMaterial 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
STM32H523CEU6	71MI*478XXXA	A	998Z	2024-02-27
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	114	mg	Each	ECOPACK® 2

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	Tin (Sn), matte, annealed	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
QFN	7x7	48	Flat	
Comment : Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210				

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 : 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			



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	71M1*478XXXA		113.8220		7000000.0	1000000.0				
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	M-011 Other inorganic materials	2.732	mg	supplier	die	Silicon (Si)	7440-21-3		2.626	mg	961313	23074				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	1907	46				
				supplier	metallization	Copper (Cu)	7440-50-8		0.045	mg	16347	392				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.015	mg	5313	128				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.000	mg	136	3				
				supplier	metallization	Tungsten (W)	7440-33-7		0.000	mg	136	3				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	4223	101				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.029	mg	10625	255				
				Glue Epoxy (EN4900GC)	Other Organic Materials	0.388	mg	supplier	Organic Compounds	Acrylic resin	Proprietary		0.028	mg	70000	244
								supplier	Organic Compounds	Polybutadiene derivative	Proprietary		0.008	mg	20000	70
supplier	Organic Compounds	Butadiene copolymer	Proprietary						0.006	mg	15000	52				
supplier	Organic Compounds	Acrylate	Proprietary						0.021	mg	54000	189				
supplier	Organic Compounds	Epoxy resin	Proprietary						0.012	mg	30000	105				
supplier	Organic Compounds	Peroxide	Proprietary						0.003	mg	8000	28				
supplier	Organic Compounds	Additive	Proprietary						0.007	mg	18000	63				
supplier	Metals	Silver	7440-22-4						0.312	mg	785000	2742				
Encapsulation (EME-G631BQ)	Other Organic Materials	36.030	mg					supplier	Organic Compounds	Epoxy Resin A	Proprietary		1.982	mg	55000	17410
								supplier	Organic Compounds	Epoxy Resin B	Proprietary		0.757	mg	21000	6648
				supplier	Organic Compounds	Phenol Resin A	Proprietary		1.982	mg	55000	17410				
				supplier	Glass	Silica(Amorphous)A	60676-86-0		27.743	mg	770000	243742				
				supplier	Glass	Silica(Amorphous)B	7631-86-9		2.882	mg	80000	25324				
				supplier	Metallic compounds	Metal Hydroxide	Proprietary		0.504	mg	14000	4432				
				supplier	Organic Compounds	Carbon Black	1333-86-4		0.180	mg	5000	1583				
Bonding Wire (Au)	Bonding Wire	1.084	mg	supplier	Metals	Gold	7440-57-5		1.084	mg	1000000	9523				
Plating anode (Sn)	Other inorganic materials	1.078	mg	supplier	Metals	Tin	7440-31-5		1.078	mg	1000000	9474				
Leadframe (C7025+AG)	Copper & its alloys	61.000	mg	supplier	Metals	Copper	7440-50-8		55.946	mg	917140	491518				
				supplier	Metals	Nickel	7440-02-0		1.373	mg	22500	12058				
				supplier	Metals	Silicon	7440-21-3		0.159	mg	2600	1393				
				supplier	Metals	Magnesium	7439-95-4		0.070	mg	1150	616				
				supplier	Metals	Silver	7440-22-4		3.453	mg	56610	30339				
External Plating (Sn)	M-011 Other inorganic materials	11.500	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		11.499	mg	999900	101025				
				supplier	Matte Sn	Impurities	Proprietary		0.001	mg	100	10				