



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*	2024-02-20
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
STM32H523CET6	715B*478XXXA	A	998Z	2024-02-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	183	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), immersion	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
QFP	7x7	48	Gull wing	
Comment	Package : 5B LQFP 48 7x7x1.4 1 0110596			

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	715B*478XXXA		183.0536		6000000.0	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	7.343	mg	supplier	die	Silicon (Si)	7440-21-3		7.059	mg	961324	38562
				supplier	metallization	Aluminium (Al)	7429-90-5		0.014	mg	1907	76
				supplier	metallization	Copper (Cu)	7440-50-8		0.120	mg	16342	656
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.039	mg	5311	213
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	136	5
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	136	5
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	4222	169
				supplier	Passivation	Silicon Oxide	7631-86-9		0.078	mg	10622	426
				supplier	Metals	Silver (Ag)	7440-22-4		0.364	mg	852000	1988
				supplier	Plastics/polymers	2,2'-(Methylenebis(phenyleneoxymethylene))bis	39817-09-9		0.013	mg	30000	70
Glue epoxy (3230)	M-011 Other inorganic materials	0.427	mg	supplier	Organic Compounds	Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7		0.013	mg	30000	70
				supplier	Organic Compounds	Dodecylolxirane	3234-28-4		0.013	mg	30000	70
				SVHC	Organic Compounds	Hexahydromethylphthalic anhydride	19438-60-9		0.013	mg	30000	70
				supplier	Organic Compounds	Epoxy resin modifier	Proprietary		0.011	mg	25000	58
				supplier	Organic Compounds	Copper oxide	1317-39-0		0.001	mg	2500	6
				supplier	Metallic compounds	maleic anhydride	108-31-6		0.000	mg	500	1
				supplier	Plastics/polymers	Epoxy Resin A	Proprietary		2.474	mg	21000	13517
				supplier	Plastics/polymers	Epoxy Resin B	Proprietary		2.474	mg	21000	13517
				supplier	Plastics/polymers	Phenol Resin	Proprietary		6.598	mg	56000	36045
				supplier	Glass	Silica(Amorphous)A	60676-86-0		91.957	mg	780450	502350
supplier	Glass	Silica(Amorphous)B	7631-86-9		13.588	mg	115320	74228				
supplier	Non-metals	Carbon Black	1333-86-4		0.734	mg	6230	4010				
Bonding wire (Au)	Bonding Wire	0.382	mg	supplier	Metals	Gold (Au)	7440-57-5		0.379	mg	990000	2068
				supplier	Non-metals	Other	Proprietary		0.004	mg	10000	21
Plating (Sn)	M-011 Other inorganic materials	1.078	mg	supplier	Metals	Tin (Sn)	7440-31-5		1.078	mg	1000000	5891
Leadframe (C194 + Ag)	Copper & its alloys	55.997	mg	supplier	Metals	Copper (Cu)	7440-50-8		54.457	mg	972499	297493
				supplier	Metals	Iron (Fe)	7439-89-6		1.266	mg	22601	6914
				supplier	Metals	Zinc (Zn)	7440-66-6		0.084	mg	1500	459
				supplier	Metals	Phosphorus (P)	7723-14-0		0.017	mg	300	92
supplier	Metals	Silver (Ag)	7440-22-4		0.174	mg	3100	948				