



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*	2024-03-20
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
STM32H523ZEJ6	2148*478XXXA	A	9991	2024-03-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	104	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	
Tin - 3.5Ag	Not Applicable	NAC	0	
Package designator	Package size	Number of instances	Shape	
BGA	10x10	144	Bulk solder	
Comment	Package : A02Y UFBGA 10X10 144L P 0.8 MM 8526251			

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	2148*478XXXA		104.0000		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	1.384	mg	supplier	die	Silicon (Si)	7440-21-3		1.330	mg	961313	12793				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.003	mg	1907	25				
				supplier	metallization	Copper (Cu)	7440-50-8		0.023	mg	16347	218				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.007	mg	5313	71				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.000	mg	136	2				
				supplier	metallization	Tungsten (W)	7440-33-7		0.000	mg	136	2				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.006	mg	4223	56				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.015	mg	10625	141				
				Substrate(A32152)	Copper & its alloys	40.356	mg	supplier	Substrate	Thermosetting resin (Including filler)	Proprietary		3.289	mg	81500	31625
								supplier	Substrate	Glass cloth	65997-17-3		18.160	mg	450000	174617
supplier	Substrate	Copper foil	7440-50-8						17.938	mg	444500	172483				
supplier	Substrate	2-benzyl-2-dimethylamino-4-morpholinobutyrph	119313-12-1						0.020	mg	500	194				
supplier	Substrate	Naphtha (petroleum), heavy aromatic	64742-94-5						0.464	mg	11500	4462				
supplier	Substrate	Propanol, 1(or 2)-(2-methoxymethyl)ethoxy)	34590-94-8						0.464	mg	11500	4462				
supplier	Substrate	Copper,[29H,31H-phthalocyaninato(2-)-,kappa.N	147-14-8						0.020	mg	500	194				
DAF (ATB-125-12)	Precious metals	19.829	mg	supplier	Glue or tape	Butadiene, acrylonitrile polymer, carboxy-terminat	68610-41-3		12.889	mg	650000	123931				
				supplier	Glue or tape	Formaldehyde, polymer with (chloromethyl)oxiran	37382-79-9		4.957	mg	250000	47666				
				supplier	Glue or tape	Dapsone	80-08-0		1.190	mg	60000	11440				
				supplier	Glue or tape	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.397	mg	20000	3813				
				supplier	Glue or tape	Reaction product: bisphenol-A-(epichlorhydrin); e	25068-38-6		0.397	mg	20000	3813				
Bonding wire (Cu)	Precious metals	1.655	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		1.598	mg	965500	15364				
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.051	mg	31000	493				
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.006	mg	3500	56				
Encapsulation (KE-G1250AAS)	Other inorganic materials	33.937	mg	supplier	Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		30.543	mg	900000	293686				
				supplier	Molding Compound	Epoxy resin	Proprietary		1.799	mg	53000	17295				
				supplier	Molding Compound	Phenol resin	Proprietary		1.459	mg	43000	14032				
				supplier	Molding Compound	Carbon Black	1333-86-4		0.136	mg	4000	1305				
				supplier	Molding Compound											
Solder Balls (96.5Sn3.5Ag)	Other Nonferrous metals & alloys	6.839	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		6.600	mg	965000	63458				
				supplier	Matte Sn	Silver (Ag)	7440-22-4		0.239	mg	35000	2302				