STRIVE FOR EXCELLENCE

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.

Signature Not Verified

Digitally signed by
MDF Champion
Date: 2024.02.27
15:27:20 GMT+08:00

Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
STM32U599NIH6Q	E3RM*481XXXX	A	9991	2024-02-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	490	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/Silver/Copper (SAC305)	Not Applicable	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
BGA	13x13	216	Bulk solder	
Comment	Package : A0L2 TFBGA 13X13X1.2 216L P 0.8 MM 8373526			

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**	**E3RM*481XXXX**		490.0000		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	7.022	mg	supplier	die	Silicon (Si)	7440-21-3		5.664	mg	806544	11558
				supplier	metallization	Aluminium (Al)	7429-90-5		0.064	mg	9185	132
				supplier	metallization	Copper (Cu)	7440-50-8		0.576	mg	82090	1176
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.185	mg	26406	378
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1148	16
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	574	8
				supplier	Passivation	Silicon Nitride	12033-89-5		0.145	mg	20666	296
				supplier	Passivation	Silicon Oxide	7631-86-9		0.375	mg	53387	765
Substrate (A29154)	Copper & its alloys	129.340	mg	supplier	Substrate	Thermosetting resin (Including filler)	Proprietary		10.541	mg	81500	21513
				supplier	Substrate	Glass cloth	65997-17-3		58.203	mg	450000	118782
				supplier	Substrate	Copper foil	7440-50-8		57.492	mg	444500	117330
				SVHC	Substrate	2-benzyl-2-dimethylamino-4-morpholinobutyropl	119313-12-1		0.065	mg	500	132
				supplier	Substrate	Naphtha (petroleum), heavy aromatic	64742-94-5		1.487	mg	11500	3036
				supplier	Substrate	TALC (CONTAINING NO ASBESTOS FIBRES	14807-96-6		1.487	mg	11500	3036
				SVHC	Substrate	1,3,5-Triazine-2,4,6-triamine	108-78-1		0.065	mg	500	132
Die attach (ATB-125)	Precious metals	7.536	mg	supplier	Glue or tape	Butadiene, acrylonitrile polymer, carboxy-termin	68610-41-3		4.898	mg	650000	9997
				supplier	Glue or tape	Formaldehyde, polymer with (chloromethyl)oxira	37382-79-9		1.884	mg	250000	3845
				supplier	Glue or tape	Dapsone	80-08-0		0.452	mg	60000	923
				supplier	Glue or tape	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.151	mg	20000	308
				supplier	Glue or tape	Reaction product: bisphenol-A-(epichlorhydrin);	25068-38-6		0.151	mg	20000	308
Bonding wire (Au)	Precious metals	2.181	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		2.181	mg	1000000	4451
Encapsulation (KE-G1250AAS)	Other inorganic materials	301.900	mg	supplier	Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		271.710	mg	900000	554510
				supplier	Molding Compound	Epoxy resin	Proprietary		16.001	mg	53000	32654
				supplier	Molding Compound	Phenol resin	Proprietary		12.982	mg	43000	26493
				supplier	Molding Compound	Carbon Black	1333-86-4		1.208	mg	4000	2464
Solder Balls (SACN305)	Other Nonferrous metals & alloys	42.021	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		40.529	mg	964500	82713
				supplier	Matte Sn	Silver (Ag)	7440-22-4		1.261	mg	30000	2573
				supplier	Matte Sn	Copper (Cu)	7440-50-8		0.210	mg	5000	429
				supplier	Matte Sn	Nickel (Ni)	7440-02-0		0.021	mg	500	43