



## 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*	2024-11-20
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 : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
STM32U385VG16	23MJ*454XXXZ	A	9991	2024-11-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	68	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	7x7	100	Bulk solder	
Comment	Package : A0C2 UFBGA 7x7x0.60 100L R12sq P0.5 8219030			

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-27th June 2024				Response
<b>QUERY</b>				<b>Response</b>
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
,	#N/A			



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	23MJ*454XXXZ	68.0000		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	1.772	mg	supplier	die	Silicon (Si)	7440-21-3		1.675	mg	945164	24630
				supplier	metallization	Aluminium (Al)	7429-90-5		0.011	mg	6053	158
				supplier	metallization	Copper (Cu)	7440-50-8		0.032	mg	18037	470
				supplier	metallization	Nickel (Ni)	7440-02-0		0.000	mg	121	3
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.006	mg	3147	82
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	726	19
				supplier	metallization	Tungsten (W)	7440-33-7		0.000	mg	121	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	4358	114
				supplier	Passivation	Silicon Oxide	7631-86-9		0.039	mg	22273	580
				Substrate (A32663)	Copper & its alloys	19.675	mg	supplier	Substrate	Copper (Cu)	7440-50-8	
supplier	Substrate	Nickel(Ni)	7440-02-0						0.726	mg	36900	10677
supplier	Substrate	Gold (Au)	7440-57-5						0.079	mg	4000	1157
supplier	Substrate	Thermosetting resin (Including filler)	Proprietary						2.361	mg	120000	34721
supplier	Substrate	Glass cloth	65997-17-3						2.361	mg	120000	34721
supplier	Substrate	Copper foil	7440-50-8						3.010	mg	153000	44269
supplier	Substrate	Acrylate resin	Proprietary						0.815	mg	41400	11979
supplier	Substrate	Barium sulfate	7727-43-7						0.374	mg	19000	5497
supplier	Substrate	Epoxy resin ( MW ≤ 7 0 0 , Carc. cat. 3 ; R40 , R	85954-11-6						0.374	mg	19000	5497
supplier	Substrate	Diethylene glycol monoethyl ether acetate	112-15-2						0.350	mg	17800	5150
supplier	Substrate	Solvent naphtha(petroleum),Heavy arom.	64742-94-5						0.262	mg	13300	3848
supplier	Substrate	Dipropylene glycol monomethyl ether	34590-94-8						0.197	mg	10000	2893
supplier	Substrate	Talc containing no asbestos fibers	14807-96-6						0.085	mg	4300	1244
DAF (ATB-125-12)	Precious metals	2.555	mg	supplier	Glue or tape	Butadiene, acrylonitrile polymer, carboxy-terminated	68610-41-3		1.661	mg	650000	24423
				supplier	Glue or tape	Formaldehyde, polymer with (chloromethyl)oxiran	37382-79-9		0.639	mg	250000	9393
				supplier	Glue or tape	Dapsone	80-08-0		0.153	mg	60000	2254
				supplier	Glue or tape	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.051	mg	20000	751
				supplier	Glue or tape	Reaction product: bisphenol-A-(epichlorohydrin); e	25068-38-6		0.051	mg	20000	751
				Bonding wire (Cu 0.8 mils)	Precious metals	0.472	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8	
supplier	Bonding wire	Palladium (Pd)	7440-05-3						0.015	mg	31000	215
supplier	Bonding wire	Gold (Au)	7440-57-5						0.002	mg	3500	24
Encapsulation (KE-G1250AAS)	Other inorganic materials	41.094	mg					supplier	Molding Compound	Silica(Fused)	60676-86-0,7631-86-9	
				supplier	Molding Compound	Epoxy resin	Proprietary		2.178	mg	53000	32029
				supplier	Molding Compound	Phenol resin	Proprietary		1.767	mg	43000	25986
				supplier	Molding Compound	Carbon Black	1333-86-4		0.164	mg	4000	2417
Solder Ball (96.5Sn3.5Ag)	Other Nonferrous metals & alloys	2.432	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		2.347	mg	965000	34513
				supplier	Matte Sn	Silver (Ag)	7440-22-4		0.085	mg	35000	1252