



## 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*	2025-03-10
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
STM32U545REI6Q	222I*455XXXY	A	9991	2025-03-10
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	33	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	5x5	64	Bulk solder	
Comment	Package : A019 UFBGA 5X5X0.6 64L P 0.5 MM 8526322			

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-21st January 2025				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
,	#N/A			



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	2221455XXXY		33.3675		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	2.021	mg	supplier	die	Silicon (Si)	7440-21-3		1.630	mg	806544	48844
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	9185	556
				supplier	metallization	Copper (Cu)	7440-50-8		0.166	mg	82090	4971
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.053	mg	26406	1599
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1148	70
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	574	35
				supplier	Passivation	Silicon Nitride	12033-89-5		0.042	mg	20666	1252
				supplier	Passivation	Silicon Oxide	7631-86-9		0.108	mg	53387	3233
Substrate (A28314)	M-011 Other inorganic materials	9.978	mg	supplier	BT-substrate	Bismaleimide-Triazine resin	Proprietary		0.172	mg	17238	5155
				supplier	BT-substrate	Epoxy resin	Proprietary		0.105	mg	10523	3147
				supplier	BT-substrate	Inorganic filler	7631-86-9		0.322	mg	32271	9650
				supplier	BT-substrate	Glass cloth	65997-17-3		2.897	mg	290339	86821
				supplier	BT-substrate	Copper foil	7440-50-8		2.771	mg	277711	83045
				supplier	Solder mask	3-methoxy-3-methylbutyl acetate	103429-90-9		1.813	mg	181700	54334
				supplier	Solder mask	Dipropylene glycol monomethyl ether	34590-94-8		0.464	mg	46502	13906
				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		0.115	mg	11525	3446
				supplier	Solder mask	Morpholine derivative	Proprietary		0.120	mg	12026	3596
				supplier	Solder mask	Barium Sulfate	7727-43-7		1.199	mg	120164	35933
DAF (ATB-125-12)	M-011 Other inorganic materials	2.552	mg	supplier	film	Butadiene, acrylonitrile polymer, carboxy-termina	68610-41-3		1.659	mg	650078	49719
				supplier	film	Formaldehyde, polymer with (chloromethyl)oxira	37382-79-9		0.638	mg	250000	19120
				supplier	film	Dapsone	80-08-0		0.051	mg	19984	1528
				supplier	film	Siloxanes and Silicones, di-Me, reaction product	67762-90-7		0.051	mg	19984	1528
				supplier	film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	Proprietary		0.051	mg	19984	1528
				supplier	film	1,3-Butadiene, acrylonitrile copolymer, 3-carbox	68891-46-3		0.051	mg	19984	1528
Bonding wire (Cu)	Precious metals	0.245	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.236	mg	965500	7083
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.008	mg	31000	227
				supplier	Bonding wire	Silver (Ag)	7440-22-4		0.001	mg	3500	26
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	17.016	mg	supplier	Molding Compound	Silica(Fused)	60676-86-0		15.314	mg	899978	458950
				supplier	Molding Compound	Epoxy resin	Proprietary		0.902	mg	53008	27032
				supplier	Molding Compound	Phenol resin	Proprietary		0.732	mg	43017	21937
				supplier	Molding Compound	Carbon Black	1333-86-4		0.068	mg	3996	2038
Solder balls (96.5SN/3.5AG)	Solder	1.556	mg	supplier	Solder	Tin (Sn)	7440-31-5		1.502	mg	965000	45000
				supplier	Solder	Silver (Ag)	7440-22-4		0.054	mg	35000	1632