



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*	2025-01-08
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
STM32U545VEI6Q	22MJ*455XXXY	A	9991	2025-01-08
Amount	Unit of measure	Unit type	ST ECOPACK grade	
64	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
QUERY				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	22MJ*455XXX'Y		64.0000		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	2.093	mg	supplier	die	Silicon (Si)	7440-21-3		1.697	mg	810798	26516
				supplier	metallization	Aluminium (Al)	7429-90-5		0.044	mg	21022	688
				supplier	metallization	Copper (Cu)	7440-50-8		0.130	mg	62112	2031
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	478	16
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	10511	344
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	2867	94
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	478	16
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	14811	484
				supplier	Passivation	Silicon Oxide	7631-86-9		0.161	mg	76923	2516
				Substrate_A312470	Other Organic Materials	24.367	mg	supplier	BT-substrate	Bismaleimide-Triazine resin	Proprietary	
supplier	BT-substrate	Epoxy resin	Proprietary						0.256	mg	10523	4007
supplier	BT-substrate	Inorganic filler	7631-86-9						0.786	mg	32272	12287
supplier	BT-substrate	Glass cloth	65997-17-3						7.075	mg	290339	110542
supplier	BT-substrate	Copper foil	7440-50-8						6.767	mg	277711	105734
supplier	Solder mask	3-methoxy-3-methylbutyl acetate	103429-90-9						4.427	mg	181700	69179
supplier	Solder mask	Dipropylene glycol monomethyl ether	34590-94-8						1.133	mg	46502	17705
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6						0.281	mg	11525	4388
supplier	Solder mask	Morpholine derivative	Proprietary						0.293	mg	12026	4579
supplier	Solder mask	Barium Sulfate	7727-43-7						2.928	mg	120164	45751
DAF (ATB-125-12)	M-011 Other inorganic materials	2.965	mg	supplier	film	Butadiene, acrylonitrile polymer, carboxy-terminal	68610-41-3		2.187	mg	737750	34179
				supplier	film	Formaldehyde, polymer with (chloromethyl)oxiran	37382-79-9		0.773	mg	260750	12080
				supplier	film	[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	2530-83-8		0.002	mg	750	35
				supplier	film	Reaction product: bisphenol-A-(epichlorhydrin); e	25068-38-6		0.002	mg	750	35
Bonding wire (Cu)	Precious metals	0.952	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.919	mg	965500	14362
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.030	mg	31000	461
				supplier	Bonding wire	Silver (Ag)	7440-22-4		0.003	mg	3500	52
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	31.191	mg	supplier	Molding Compound	Epoxy resin	Proprietary		1.248	mg	40000	19494
				supplier	Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		28.072	mg	900000	438623
				supplier	Molding Compound	Phenol resin	Proprietary		1.747	mg	56000	27292
				supplier	Molding Compound	Carbon Black	1333-86-4		0.125	mg	4000	1949
Solder balls (96.5Sn/3.5Ag)	Solder	2.432	mg	supplier	Solder	Tin (Sn)	7440-31-5		2.347	mg	965000	36670
				supplier	Solder	Silver (Ag)	7440-22-4		0.085	mg	35000	1330