



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 : 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
STM32U385RG16	232I*454CSXZ	A	9991	2024-11-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	41	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-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	2321454CSXZ		41.3504		600000.0	100000.0				
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	8.722	mg	supplier	die	Silicon (Si)	7440-21-3		8.388	mg	961672	202854				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.037	mg	4229	892				
				supplier	metallization	Copper (Cu)	7440-50-8		0.110	mg	12619	2662				
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	67	14				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.019	mg	2148	453				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	537	113				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	67	14				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.026	mg	3021	637				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.136	mg	15640	3299				
				Substrate(A32321)	Copper & its alloys	9.990	mg	supplier	Substrate	Copper (Cu)	7440-50-8		4.895	mg	490000	118381
								supplier	Substrate	Gold (Au)	7440-57-5		0.799	mg	80000	19328
								supplier	Substrate	Nickel(Ni)	7440-02-0		0.400	mg	40000	9664
supplier	Substrate	Cured thermosetting resin	Proprietary						0.450	mg	45000	10872				
supplier	Substrate	Continuous Filament Glass	Proprietary						0.450	mg	45000	10872				
supplier	Substrate	Copper	7440-50-8						1.099	mg	110000	28575				
supplier	Substrate	Barium Sulfate	7727-43-7						0.649	mg	65000	15704				
supplier	Substrate	Talc	14807-96-6						0.250	mg	25000	6040				
supplier	Substrate	Dipropylene Glycol Monomethyl Ether	34590-94-8						0.250	mg	25000	6040				
supplier	Substrate	Epoxy Resin	85954-11-6						0.450	mg	45000	10872				
supplier	Substrate	Solvent naphtha(petroleum),Heavy arom	64742-94-5						0.300	mg	30000	7248				
DAF (ATB-125-12)	Precious metals	2.555	mg					supplier	Glue or tape	Butadiene, acrylonitrile polymer, carboxy-terminat	68610-41-3		1.661	mg	650000	40163
				supplier	Glue or tape	Formaldehyde, polymer with (chloromethyl)oxiran	37382-79-9		0.639	mg	250000	15447				
				supplier	Glue or tape	Dapsone	80-08-0		0.153	mg	60000	3707				
				supplier	Glue or tape	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.051	mg	20000	1236				
				supplier	Glue or tape	Reaction product: bisphenol-A-(epichlorhydrin), e	25068-38-6		0.051	mg	20000	1236				
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.254	mg	965500	6141				
Bonding wire (Cu)	Precious metals	0.263	mg	supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.008	mg	31000	197				
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.001	mg	3500	22				
				supplier	Bonding wire	Silica(Fused)	60676-86-0,7631-86-9		16.438	mg	900000	397520				
Encapsulation (KE-G1250AAS)	Other inorganic materials	18.264	mg	supplier	Molding Compound	Proprietary			0.968	mg	53000	23409				
				supplier	Molding Compound	Phenol resin	Proprietary		0.785	mg	43000	18993				
				supplier	Molding Compound	Carbon Black	1333-86-4		0.073	mg	4000	1767				
				supplier	Molding Compound	Tin (Sn)	7440-31-5		1.502	mg	965000	36313				
Solder Ball(96.5SN/3.5AG)	Other Nonferrous metals & alloys	1.556	mg	supplier	Matte Sn	Silver (Ag)	7440-22-4		0.054	mg	35000	1317				