



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D  <i>* : Required Field</i>


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	17-12-2022
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Material Declaration champion	<b>Representative Title</b>	Material Declaration champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G0B1RBI3N STM32G0B1RBI3NTR	232I*467XXXZ	A	9991	17-12-2022
Amount	UoM	Unit type	ST ECOPACK Grade	
34.40	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	NAC	Copper Alloy	96.5SN/3.5AG_0.20MM	

Package Designator	Size	Nbr 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	
Query	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-10 Jun 2022				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	2321*467XXXZ				6000000.0	999999.3
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	1.457	mg	supplier	die	Silicon (Si)	7440-21-3		1.120	mg	768703	32558
				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	10981	465
				supplier	metallization	Copper (Cu)	7440-50-8		0.143	mg	98147	4157
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.046	mg	31572	1337
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1373	58
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	686	29
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	24708	1047
Substrate_A283140	M-011 Other inorganic materials	11.990	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.093	mg	63830	2703
				supplier	BT-substrate	Thermosetting resin (Including filler)	Undisclosed		0.959	mg	80000	27884
					BT-substrate	Glass cloth	65997-17-3		3.837	mg	320000	111535
					BT-substrate	Copper foil	7440-50-8		4.316	mg	360000	125477
					BT-substrate	3-methoxy-3-methylbutylacetate	103429-90-9		0.600	mg	50000	17427
					BT-substrate	Morpholine derivative	Trade secret		0.120	mg	10000	3485
					Solder mask	Barium Sulfate	7727-43-7		1.439	mg	120000	41826
					Solder mask	Talc containing no asbestiform fibers	14807-96-6		0.060	mg	5000	1743
					Solder mask	Dipropylene glycol monomethyl ether	34590-94-8		0.659	mg	55000	19170
				Die Attach ATB-125-12 (30)	M-011 Other inorganic materials	2.552	mg	supplier	film	Butadiene, acrylonitrile polymer, carboxy-term	68610-41-3	
	film	Formaldehyde, polymer with (chloromethyl)ox	37382-79-9						0.665	mg	260750	19344
	film	Dapsone	80-08-0						0.102	mg	40000	2967
	film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8						0.002	mg	750	56
	film	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6						0.002	mg	750	56
Bonding wire (Cu 0.8mils)	Precious metals	0.200	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.193	mg	965500	5613
					Bonding wire	Palladium (Pd)	7440-05-3		0.006	mg	31000	180
					Bonding wire	Gold (Au)	7440-57-5		0.001	mg	3500	20
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	16.645	mg	supplier	Molding Compound	Epoxy resin	Trade secret		0.666	mg	40000	19355
					Molding Compound	Silical(Fused)	60676-86-0,7631-86-9		14.981	mg	900000	435480
					Molding Compound	Phenol resin	Trade secret		0.932	mg	56000	27097
					Molding Compound	Carbon Black	1333-86-4		0.067	mg	4000	1935
Solder balls (96.55N/3.5AG_0.20MM)	Solder	1.556	mg	supplier	Solder	Tin (Sn)	7440-31-5		1.502	mg	965000	43649
					Solder	Silver (Ag)	7440-22-4		0.054	mg	35000	1583