




Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	21-07-2023
Company Unique ID	NL 008751171B01		
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 *	Material Declaration champion	Representative Title	Material 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	
	<p>While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.</p>
Legal Statement	
Supplier Acceptance *	true
Legal Declaration *	Standard
Legal Statement	<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
STM32U5F9ZJJ6Q	2148*476XXXZ	A	9991	21-07-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	104.00	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	NAC	Sn96.5/Ag3.5	

Package Designator	Size	Nbr of instances	Shape	
BGA	10x10	144	bulk solder	
Comment	Package : A02Y UFBGA 10X10 144L P 0.8 MM 8526251			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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	2148*476XXXZ				6000000.0	999998.5
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	15.279	mg	supplier	die	Silicon (Si)	7440-21-3		14.161	mg	926828	136163
				supplier	metallization	Aluminium (Al)	7429-90-5		0.124	mg	8116	1192
				supplier	metallization	Copper (Cu)	7440-50-8		0.368	mg	24085	3538
				supplier	metallization	Nickel (Ni)	7440-02-0		0.002	mg	131	19
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.063	mg	4123	606
				supplier	metallization	Titanium (Ti)	7440-32-6		0.016	mg	1047	154
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	131	19
				supplier	Passivation	Silicon Nitride	12033-89-5		0.088	mg	5760	846
				supplier	Passivation	Silicon Oxide	7631-86-9		0.455	mg	29779	4375
				Substrate (A313790)	M-011 Other inorganic materials	33.356	mg	supplier	BT-substrate	Thermosetting resin (Inorganic filler)	Proprietary	
supplier	BT-substrate	Glass cloth	65997-17-3						12.375	mg	371000	118991
supplier	BT-substrate	Copper foil	7440-50-8						15.294	mg	458500	147055
supplier	Solder mask	Solvent naphtha (petroleum), heavy arom.	64742-94-5						1.184	mg	35500	11386
supplier	Solder mask	Propanol, 1(or 2)-(2-methoxymethylethoxy)-	34590-94-8						1.167	mg	35000	11226
supplier	Solder mask	2-benzyl-2-dimethylamino-4-morpholinobutyric acid	119313-12-1						1.117	mg	33500	10744
supplier	Solder mask	Copper,[29H,31H-phthalocyaninato(2-)-]kappa	147-14-8						0.217	mg	6500	2085
supplier	film	Butadiene, acrylonitrile polymer, carboxy-term	68610-41-3						5.547	mg	666250	53338
supplier	film	Formaldehyde, polymer with (chloromethyl)ox	37382-79-9						2.198	mg	263950	21131
supplier	film	Dapsone	80-08-0						0.307	mg	36900	2954
DAF (ATB-125)	M-011 Other inorganic materials	8.326	mg	supplier	film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.141	mg	16900	1353
				supplier	film	reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6		0.133	mg	16000	1281
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.003	mg	3500	28
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.794	mg	965500	7631
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.025	mg	31000	245
				supplier	Molding Compound	Epoxy resin	Proprietary		1.575	mg	40000	15145
				supplier	Molding Compound	Silical (Fused)	60676-86-0,7631-86-9		35.440	mg	900000	340771
				supplier	Molding Compound	Phenol resin	Proprietary		2.205	mg	56000	21204
				supplier	Molding Compound	Carbon Black	1333-86-4		0.158	mg	4000	1515
				Solderballs (Sn96.5/Ag3.5)	M-011 Other inorganic materials	6.839	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5	
supplier	Matte Sn	Silver (Ag)	7440-22-4						0.236	mg	34500	2269