




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 *	2023-06-06
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
STM32C031K6U6	70MG*453XXXZ	A	998Z	2023-06-06
Amount	UoM	Unit type	ST ECOPACK Grade	
48.59	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	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5x5x0.55	32	flat	
Comment	Package : A0B8 UFQFPN 5X5X0.55 32L 0.5 MM PITCH 8202208			

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	70MG*453XXXZ				6000000.0	1000033.7
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	1.031	mg	supplier	die	Silicon (Si)	7440-21-3		0.931	mg	903007	19160
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	4850	103
				supplier	metallization	Copper (Cu)	7440-50-8		0.042	mg	40737	864
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.014	mg	13579	288
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	970	21
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	10669	226
				supplier	Passivation	Silicon Oxide	7631-86-9		0.027	mg	26188	556
Glue epoxy (EN900GC)	M-011 Other inorganic materials	0.350	mg	Supplier	Organic Compounds	Acrylic resin	Trade Secret		0.025	mg	70000	504
				Supplier	Organic Compounds	Polybutadiene derivative	Trade Secret		0.007	mg	20000	144
				Supplier	Organic Compounds	Butadiene copolymer	Trade Secret		0.005	mg	15000	108
				Supplier	Organic Compounds	Acrylate	Trade Secret		0.019	mg	54000	389
				Supplier	Organic Compounds	Epoxy resin	Trade Secret		0.011	mg	30000	216
				Supplier	Organic Compounds	Peroxide	Trade Secret		0.003	mg	8000	58
				Supplier	Organic Compounds	Additive	Trade Secret		0.006	mg	18000	130
Encapsulation (EME-G770)	M-011 Other inorganic materials	17.779	mg	Supplier	Metals	Silver	7440-22-4		0.275	mg	785000	5656
				Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.373	mg	21000	7684
				Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.373	mg	21000	7684
				Supplier	Organic Compounds	Phenol Resin A	Trade Secret		0.373	mg	21000	7684
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		13.876	mg	780450	285584
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		2.050	mg	115320	42198
				Supplier	Organic Compounds	Carbon Black	1333-86-4		0.111	mg	6230	2280
Bonding Wire (Au)	Bonding Wire	0.410	mg	Supplier	Metallic compounds	Metal Hydroxide	Trade Secret		0.249	mg	14000	5123
				Supplier	Organic Compounds	Phenol Resin B	Trade Secret		0.373	mg	21000	7684
				Supplier	Metals	Gold	7440-57-5		0.410	mg	1000000	8443
Plating Anode (Sn)	M-011 Other inorganic materials	0.719	mg	Supplier	Metals	Tin	7440-31-5		0.719	mg	1000000	14796
				Supplier	Metals	Copper	7440-50-8		25.955	mg	917140	534186
Leadframe (C7025 + Ag)	Copper & its alloys	28.300	mg	Supplier	Metals	Nickel	7440-02-0		0.637	mg	22500	13105
				Supplier	Metals	Silicon	7440-21-3		0.074	mg	2600	1514
				Supplier	Metals	Magnesium	7439-95-4		0.033	mg	1150	670
				Supplier	Metals	Silver	7440-22-4		1.602	mg	56610	32972