




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 *	2023-04-05
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
STM32G051G8U6	70MB*456XXXZ	A	998Z	2023-04-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	24.05	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	4x4x0.55	28	flat	
Comment	Package : A0B0 UFQFPN 4X4X0.55 28L PITCH0.5 COL 8202209			

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	70M8*456XXXZ				4999999.0	1000002.1				
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	1.692	mg	supplier	die	Silicon (Si)	7440-21-3		1.531	mg	904846	63669				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	4728	333				
				supplier	metallization	Copper (Cu)	7440-50-8		0.068	mg	40189	2828				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	13002	915				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	591	42				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	591	42				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	10047	707				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	26005	1830				
				DAF (HR-5104)	M-011 Other inorganic materials	0.566	mg	Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.054	mg	95238	2243
								Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.081	mg	142857	3364
Supplier	Organic Compounds	Phenol Resin	Trade Secret						0.081	mg	142857	3364				
Supplier	Organic Compounds	SiO2 Filler	7631-86-9						0.270	mg	476190	11215				
Supplier	Metals	(Meta)Acrylic Copolymer	Trade Secret						0.081	mg	142857	3364				
Encapsulation (G770HCD)	M-011 Other inorganic materials	9.344	mg	Supplier	Plastics/polymers	Epoxy Resin	Trade Secret		0.196	mg	21000	8160				
				Supplier	Plastics/polymers	Phenol Resin	Trade Secret		0.196	mg	21000	8160				
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		7.816	mg	836450	325029				
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		1.078	mg	115320	44811				
				Supplier	Non-metals	Carbon Black	1333-86-4		0.058	mg	6230	2421				
Bonding Wire (Au)	Bonding Wire	0.244	mg	Supplier	Metals	Gold	7440-57-5		0.244	mg	1000000	10152				
Leadframe (C7025 + NiPdAu)	Copper & its alloys	12.200	mg	Supplier	Metals	Silicon	7440-21-3		0.031	mg	2500	1268				
				Supplier	Metals	Copper	7440-50-8		11.712	mg	960000	487058				
				Supplier	Metals	Magnesium	7439-95-4		0.024	mg	2000	1015				
				Supplier	Metals	Nickel	7440-02-0		0.422	mg	34600	17554				
				Supplier	Metals	Gold	7440-57-5		0.002	mg	200	101				
				Supplier	Metals	Silver	7440-22-4		0.002	mg	200	101				
				Supplier	Metals	Palladium	7440-05-3		0.006	mg	500	254				