



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 *	13-07-2023
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
STM32G051C8T6	705B*456XXXZ	A	998Z	13-07-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	178.39	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	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7x7	48	L bend	
Comment	Package : 5B LQFP 48 7x7x1.4 1 0110596			

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	705B*456XXXZ				6000002.0	1000000.3				
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	4.227	mg	supplier	die	Silicon (Si)	7440-21-3		4.066	mg	961912	22793				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	1893	45				
				supplier	metallization	Copper (Cu)	7440-50-8		0.068	mg	16087	381				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	5205	123				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	237	6				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	237	6				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	4022	95				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	10409	247				
				Glue epoxy (3230)	M-011 Other inorganic materials	0.566	mg	Supplier	Metals	Silver (Ag)	7440-22-4		0.462	mg	815000	2590
								Supplier	Plastics/polymers	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.017	mg	30000	95
Supplier	Organic Compounds	Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7						0.017	mg	30000	95				
Supplier	Organic Compounds	Epoxy resin	Proprietary						0.017	mg	30000	95				
Supplier	Organic Compounds	Dodecylloxirane	3234-28-4						0.017	mg	30000	95				
Supplier	Organic Compounds	Hexahydromethylphthalic anhydride	25550-51-0						0.017	mg	30000	95				
Supplier	Organic Compounds	Epoxy resin modifier	Proprietary						0.017	mg	30000	95				
Supplier	Metallic compounds	Copper oxide	1317-38-0						0.003	mg	5000	17				
Encapsulation (EME-G6315HQ)	M-011 Other inorganic materials	120.728	mg					Supplier	Plastics/polymers	Epoxy Resin A	Trade Secret		2.535	mg	21000	14211
								Supplier	Plastics/polymers	Epoxy Resin B	Trade Secret		2.535	mg	21000	14211
				Supplier	Plastics/polymers	Phenol Resin	Trade Secret		6.761	mg	56000	37901				
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		94.222	mg	780450	528189				
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		13.922	mg	115320	78044				
				Supplier	Non-metals	Carbon Black	1333-86-4		0.752	mg	6230	4216				
Bonding Wire (Au)	Bonding Wire	0.783	mg	Supplier	Metals	Gold (Au)	7440-57-5		0.783	mg	1000000	4389				
Plating (Sn)	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin (Sn)	7440-31-5		1.078	mg	1000000	6043				
Leadframe (C194 + Ag)	Copper & its alloys	51.005	mg	Supplier	Metals	Copper (Cu)	7440-50-8		49.589	mg	972238	277986				
				Supplier	Metals	Iron (Fe)	7439-89-6		1.158	mg	22704	6492				
				Supplier	Metals	Zinc (Zn)	7440-66-6		0.077	mg	1510	432				
				Supplier	Non-Metals	Phosphorus (P)	7723-14-0		0.015	mg	294	84				
				Supplier	Metals	Silver (Ag)	7440-22-4		0.166	mg	3255	931				