



## 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>	29-11-2022
<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**

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.

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
STM32G050K8T6 STM32G050K8T6TR	745V*456XXXZ	A	998Z	29-11-2022
	Amount	UoM	Unit type	ST ECOPACK Grade
	177.86	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	32	L bend	
Comment	Package : 5V LQFP 32 7x7x1.4 1 0060661			

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	745V*456XXXZ				6000000.0	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	4.230	mg	supplier	die	Silicon (Si)	7440-21-3		4.069	mg	961939	22878
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	1891	45
				supplier	metallization	Copper (Cu)	7440-50-8		0.068	mg	16076	382
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	5201	124
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	236	6
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	236	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	4019	96
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	10402	247
Glue epoxy_Ablestik_3230	M-011 Other inorganic materials	0.566	mg	Supplier	Metals	Silver	7440-22-4		0.462	mg	815000	2595
				Supplier	Plastics/polymers	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.017	mg	30000	96
				Supplier	Organic Compounds	Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7		0.017	mg	30000	96
				Supplier	Organic Compounds	Epoxy resin	Proprietary		0.017	mg	30000	96
				Supplier	Organic Compounds	Dodecylloxirane	3234-28-4		0.017	mg	30000	96
				Supplier	Organic Compounds	Hexahydromethylphthalic anhydride	25550-51-0		0.017	mg	30000	96
				Supplier	Organic Compounds	Epoxy resin modifier	Proprietary		0.017	mg	30000	96
				Supplier	Metallic compounds	Copper oxide	1317-38-0		0.003	mg	5000	16
Encapsulation_EME-G631SHQ	M-011 Other inorganic materials	120.748	mg	Supplier	Plastics/polymers	Epoxy Resin A	Trade Secret		2.536	mg	21000	14257
				Supplier	Plastics/polymers	Epoxy Resin B	Trade Secret		2.536	mg	21000	14257
				Supplier	Plastics/polymers	Phenol Resin	Trade Secret		6.762	mg	56000	38019
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		94.238	mg	780450	529853
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		13.925	mg	115320	78292
				Supplier	Non-metals	Carbon Black	1333-86-4		0.752	mg	6230	4230
Wire_Auha3_0.8mil	Bonding Wire	0.587	mg	Supplier	Metals	Gold	7440-57-5		0.587	mg	1000000	3301
Plating Anode_Pure Tin_Asahi	M-011 Other inorganic materials	0.719	mg	Supplier	Metals	Tin	7440-31-5		0.719	mg	1000000	4042
Leadframe_C194+Ag_Hds	Copper & its alloys	51.007	mg	Supplier	Metals	Copper	7440-50-8		49.589	mg	972200	278814
				Supplier	Metals	Iron ( Fe )	7439-89-6		1.158	mg	22700	6510
				Supplier	Metals	Zinc ( Zn )	7440-66-6		0.077	mg	1500	430
				Supplier	Non-Metals	Phosphorus ( P )	7723-14-0		0.015	mg	300	86
				Supplier	Metals	Silver	7440-22-4		0.166	mg	3250	932
	JIG-R			Supplier	Metals	Lead	7439-92-1		0.003	mg	50	14