



## 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>	23-08-2023
<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	
	<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	
<b>Supplier Acceptance *</b>	true
	<b>Legal Declaration *</b> <b>Standard</b>
<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
STM32H7R3L8H6	21B*485XXXY	A	9991	23-08-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	338.00	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	Copper Alloy	SACN305	

Package Designator	Size	Nbr of instances	Shape	
BGA	13x13	225	bulk solder	
Comment	Package : B04V TFBGA 13X13X1.2 225L P 0.80 MM DM00384539			

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	21B*485XXX				6000000.0	1000001.9				
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	6.999	mg	supplier	die	Silicon (Si)	7440-21-3		6.527	mg	932562	19311				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.056	mg	8001	166				
				supplier	metallization	Copper (Cu)	7440-50-8		0.175	mg	25004	518				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	143	3				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.029	mg	4143	86				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	714	15				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	143	3				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.205	mg	29290	607				
				Substrate (A307790)	M-011 Other inorganic materials	83.886	mg	supplier	BT-substrate	Thermosetting resin (Inorganic filler)	Proprietary		5.033	mg	60000	14891
									BT-substrate	Glass cloth	65997-17-3		22.058	mg	262950	65260
	BT-substrate	Copper foil	7440-50-8						27.557	mg	328500	81528				
	Solder mask	Ethanol, 2-(2-ethoxyethoxy)-, 1-acetate	112-15-2						9.689	mg	115500	28665				
	Solder mask	Naphtha (petroleum), heavy aromatic	64742-94-5						11.325	mg	135000	33505				
	Solder mask	Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)-	75980-60-8						2.810	mg	33500	8314				
	Solder mask	TALC (CONTAINING NO ASBESTOS FIBRES)	14807-96-6						3.062	mg	36500	9059				
	Solder mask	Dipropylene glycol Methylene Ether Acetate	88917-22-0						2.223	mg	26500	6577				
	Solder mask	1,3,5-Triazine-2,4,6-triamine	108-78-1						0.130	mg	1550	385				
DAF (2100AC)	M-011 Other inorganic materials	3.772	mg					supplier	film	Copper (Cu)	7440-50-8		3.123	mg	827850	9239
					film	Silver (Ag)	7440-22-4		0.290	mg	76850	858				
					film	2,2-dimethyl-1,3-propanediyl bismethacrylate	1985-51-9		0.139	mg	36900	412				
					film	A mixture of: 4-allyl-2,6-bis (2,3-epoxypropyl)phenylmethane	Proprietary		0.101	mg	26900	300				
					film	2-[[[2,2-bis[[[1-(oxoallyloxy)methyl]butoxy]methyl]oxy]ethoxy]ethyl]oxy]ethyl acetate	94108-97-1		0.098	mg	26000	290				
					film	tert-butyl peroxyneodecanoate	26748-41-4		0.019	mg	5000	56				
					film	Hydroquinone	123-31-9		0.002	mg	500	6				
Bonding wire (Cu)	Precious metals	1.488	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.005	mg	3500	15				
					Bonding wire	Copper (Cu)	7440-50-8		1.437	mg	965500	4250				
					Bonding wire	Palladium (Pd)	7440-05-3		0.046	mg	31000	136				
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	198.083	mg	supplier	Molding Compound	Epoxy resin	Proprietary		7.923	mg	40000	23442				
					Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		178.275	mg	900000	527440				
					Molding Compound	Phenol resin	Proprietary		11.093	mg	56000	32818				
					Molding Compound	Carbon Black	1333-86-4		0.792	mg	4000	2344				
Solder balls (SACN305)	M-011 Other inorganic materials	43.772	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		42.218	mg	964500	124906				
					Matte Sn	Silver (Ag)	7440-22-4		1.313	mg	30000	3885				
					Matte Sn	Copper	7440-50-8		0.219	mg	5000	648				
					Matte Sn	Nickel	7440-02-0		0.022	mg	500	65				