



## 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>	2023-02-08
<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>
	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
STM32MP157FAA1	E8GU*500XXZ	A	9991	2023-02-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	886.00	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	18x18	448	bulk solder	
Comment	Package : B032 LFBGA18X18X1.40 448L P.8 B.4 DM00342573			

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	E8GU*500XXXZ				5999999.1	1000001.4
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	6.231	mg	supplier	die	Silicon (Si)	7440-21-3		5.336	mg	856363	6023
				supplier	metallization	Aluminium (Al)	7429-90-5		0.099	mg	15888	112
				supplier	metallization	Copper (Cu)	7440-50-8		0.294	mg	47183	332
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	160	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.051	mg	8185	58
				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	2086	15
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	321	2
				supplier	Passivation	Silicon Nitride	12033-89-5		0.071	mg	11395	80
				supplier	Passivation	Silicon Oxide	7631-86-9		0.364	mg	58418	411
				Substrate (A28411A)	M-011 Other inorganic materials	374.028	mg	supplier	BT-substrate	Thermosetting resin (Including filler)	Proprietary	
supplier	BT-substrate	Glass cloth	65997-17-3						104.728	mg	280000	118203
supplier	BT-substrate	Copper foil	7440-50-8						97.247	mg	260000	109760
supplier	Solder mask	Dipropylene glycol monomethyl ether	34590-94-8						18.701	mg	50000	21108
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6						3.740	mg	10000	4222
supplier	Solder mask	Barium Sulfate	7727-43-7						44.883	mg	120000	50658
supplier	Solder mask	Solventnaphtha (petroleum), Heavyarom.	64742-94-5						35.533	mg	95000	40105
supplier	Solder mask	Epoxyresin	85954-11-6						35.533	mg	95000	40105
supplier	Solder mask	Phosphinoxidederivative	Proprietary						3.740	mg	10000	4222
DAF (ATB-125)	M-011 Other inorganic materials	6.667	mg					supplier	film	Butadiene, acrylonitrile polymer, carboxy-term	68610-41-3	
				supplier	film	Formaldehyde, polymer with (chloromethyl)ox	37382-79-9		1.738	mg	260687	1962
				supplier	film	Dapsone	80-08-0		0.267	mg	40048	301
				supplier	film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.005	mg	750	6
				supplier	film	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6		0.005	mg	750	6
Bonding Wire (Au)	Precious metals	4.994	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		4.994	mg	1000000	5637
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	406.925	mg	supplier	Molding Compound	Epoxy resin	Proprietary		16.277	mg	40000	18371
				supplier	Molding Compound	Silical (Fused)	60676-86-0,7631-86-9		366.233	mg	900000	413355
				supplier	Molding Compound	Phenol resin	Proprietary		22.788	mg	56000	25720
				supplier	Molding Compound	Carbon Black	1333-86-4		1.628	mg	4000	1837
Solder Balls (SACN305)	Solder	87.154	mg	supplier	Solder	Tin (Sn)	7440-31-5		84.060	mg	964500	94876
				supplier	Solder	Silver (Ag)	7440-22-4		2.615	mg	30000	2951
				supplier	Solder	Copper (Cu)	7440-50-8		0.436	mg	5000	492
				supplier	Solder	Nickel (Ni)	7440-02-0		0.044	mg	500	49