Materials Declaration Form

IPC	**1752**	**Version**	**2**
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D ***** : Required Field***

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2023-11-09
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

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Legal Statement

Supplier Acceptance *	true	**Legal Declaration ***	Standard

Legal Statement	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 omprehensive 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.

Signature Not
Verified

Digitally signed by
MDF Champion
Date: 2023.09.11
10:00:55 +08:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STM32G071CBU7 STM32G071CBU7TR	E4MI*460XXXY	A	9991	2023-11-09
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	99.70	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**		
3	260	3		
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable ; if coating is used or other bulk termaination : add in comments	Tin (Sn), matte	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
QFN	7x7x0.55	48	flat	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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**	**E4MI*460XXXY**				6000000.0	1000010.8
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	2.101	mg	supplier	die	Silicon (Si)	7440-21-3		1.904	mg	906235	19097
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	4284	90
				supplier	metallization	Copper (Cu)	7440-50-8		0.084	mg	39981	843
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.027	mg	12851	271
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	476	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	476	10
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	9995	211
				supplier	Passivation	Silicon Oxide	7631-86-9		0.054	mg	25702	542
Leadframe (C7025 + Ag)	Copper & its alloys	55.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		51.920	mg	944000	520762
				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.096	mg	1750	965
				supplier	Leadframe	Silicon (Si)	7440-21-3		0.399	mg	7250	3999
				supplier	Leadframe	Nickel (Ni)	7440-02-0		1.760	mg	32000	17653
				supplier	Leadframe	Silver (Ag)	7440-22-4		0.825	mg	15000	8275
Glue epoxy (EN4900G)	M-011 Other inorganic materials	1.000	mg	supplier	Glue or tape	Silver Powder	7440-22-4		0.764	mg	764000	7663
				supplier	Glue or tape	Bisphenol F Type Epoxy Resin	9003-36-5		0.030	mg	30000	301
				supplier	Glue or tape	Epoxy resin	Proprietary		0.060	mg	60000	602
				supplier	Glue or tape	Hardener	Proprietary		0.030	mg	30000	301
				supplier	Glue or tape	Ethylene dimethacrylate	97-90-5		0.075	mg	75000	752
				supplier	Glue or tape	1,4-Cyclohexanedimethanol diglycidyl ether	14228-73-0		0.030	mg	30000	301
				supplier	Glue or tape	Dicyandiamide	461-58-5		0.006	mg	5500	55
				supplier	Glue or tape	1,1-Di(t-butylperoxy)cyclohexane	3006-86-8		0.006	mg	5500	55
Bonding wire (Au)	Precious metals	0.900	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.900	mg	999900	9026
				supplier	Bonding wire	Others	-		0.000	mg	100	1
Encapsulation (EME-G631SH)	M-011 Other inorganic materials	37.600	mg	supplier	Molding Compound	2,2'-((3,3',5,5'-Tetramethyl-(1,1'-biphenyl)-4,4'	85954-11-6		1.128	mg	30000	11314
				supplier	Molding Compound	Epoxy resin	Proprietary		0.752	mg	20000	7543
				supplier	Molding Compound	Phenol Resin	Proprietary		2.237	mg	59500	22439
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		26.884	mg	715000	269649
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		5.640	mg	150000	56570
				supplier	Molding Compound	Metal Hydroxide	Proprietary		0.752	mg	20000	7543
				supplier	Molding Compound	Carbon black	1333-86-4		0.207	mg	5500	2074
Plating (Sn)	M-011 Other inorganic materials	3.100	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		3.100	mg	999900	31090
				supplier	Matte Sn	Impurities	-		0.000	mg	100	3