Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	22-09-2023
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

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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: 2023.09.22
16:15:37 -08:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STM32U031C6U6	71MI*459XXXA	A	998Z	22-09-2023
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	101.56	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), immersion	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**	**71MI*459XXXA**				6000001.0	1000003.4
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	2.120	mg	supplier	die	Silicon (Si)	7440-21-3		1.915	mg	903302	18855
				supplier	metallization	Aluminium (Al)	7429-90-5		0.010	mg	4717	98
				supplier	metallization	Copper (Cu)	7440-50-8		0.087	mg	41038	857
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.028	mg	13208	276
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	472	10
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	472	10
				supplier	Passivation	Silicon Nitride	12033-89-5		0.022	mg	10377	217
				supplier	Passivation	Silicon Oxide	7631-86-9		0.056	mg	26415	551
Glue Epoxy (EN4900GC)	M-011 Other inorganic materials	0.308	mg	Supplier	Organic Compounds	Acrylic resin	Proprietary		0.022	mg	70000	213
				Supplier	Organic Compounds	Polybutadiene derivative	Proprietary		0.006	mg	20000	61
				Supplier	Organic Compounds	Butadiene copolymer	Proprietary		0.005	mg	15000	46
				Supplier	Organic Compounds	Acrylate	Proprietary		0.017	mg	54000	164
				Supplier	Organic Compounds	Epoxy resin	Proprietary		0.009	mg	30000	91
				Supplier	Organic Compounds	Peroxide	Proprietary		0.002	mg	8000	24
				Supplier	Organic Compounds	Additive	Proprietary		0.006	mg	18000	55
				Supplier	Metals	Silver (Ag)	7440-22-4		0.242	mg	785000	2384
Encapsulation (EME-G770)	M-011 Other inorganic materials	36.752	mg	Supplier	Organic Compounds	Epoxy Resin A	Proprietary		0.772	mg	21000	7599
				Supplier	Organic Compounds	Epoxy Resin B	Proprietary		0.772	mg	21000	7599
				Supplier	Organic Compounds	Phenol Resin A	Proprietary		0.772	mg	21000	7599
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		28.683	mg	780450	282415
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		4.238	mg	115320	41730
				Supplier	Organic Compounds	Carbon Black	1333-86-4		0.229	mg	6230	2254
				Supplier	Metallic compounds	Metal Hydroxide	Proprietary		0.515	mg	14000	5066
				Supplier	Organic Compounds	Phenol Resin B	Proprietary		0.772	mg	21000	7599
Bonding wire (Au)	Bonding Wire	0.306	mg	Supplier	Metals	Gold (Au)	7440-57-5		0.306	mg	1000000	3011
Plating (Sn)	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin (Sn)	7440-31-5		1.078	mg	1000000	10618
Leadframe (C7025 + Ag)	Copper & its alloys	61.000	mg	Supplier	Metals	Copper (Cu)	7440-50-8		55.946	mg	917140	550837
				Supplier	Metals	Nickel (Ni)	7440-02-0		1.373	mg	22500	13514
				Supplier	Metals	Silicon (Si)	7440-21-3		0.159	mg	2600	1562
				Supplier	Metals	Magnesium (Mg)	7439-95-4		0.070	mg	1150	691
				Supplier	Metals	Silver (Ag)	7440-22-4		3.453	mg	56610	34000