Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information	*: Required Field	

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2024-08-09
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*	MDG CHAMPION	Representative title	MDGMaterial 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

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.

Material declaration form

ACTIVE: 8/9/2024

Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
STM32C051K8U6	20MG*44CXXXA	A	9991	2024-08-09
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	46	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
3	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
QFN	5x5	32	Flat	
Comment	Package : A0B8 UFQFPN 5X5X0.55 32L 0.5 MM PITCH 8202208			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	**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-27th June 2024				**Response**
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
,	0			

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**20MG*44CXXXA**		46.0000		6000000.0	1000000.0
Homogeneous material	**Material group**	**Mass**	**Unit of measure**	**Level**	**Substance category**	**Substance**	**CAS**	**Exempt**	**Mass**	**Unit of measure**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die or dies	M-011 Other inorganic materials	1.147	mg	supplier	die	Silicon (Si)	7440-21-3		1.123	mg	979021	24412
				supplier	metallization	Aluminium (Al)	7429-90-5		0.001	mg	999	25
				supplier	metallization	Copper (Cu)	7440-50-8		0.010	mg	8991	224
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	2997	75
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	2248	56
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5744	143
Leadframe (C7025 + Ag)	Copper & its alloys	10.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		9.440	mg	944000	205217
				supplier	Leadframe	Silver (Ag)	7440-22-4		0.150	mg	15000	3261
				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.018	mg	1750	380
				supplier	Leadframe	Silicon (Si)	7440-21-3		0.073	mg	7250	1576
				supplier	Leadframe	Nickel (Ni)	7440-02-0		0.320	mg	32000	6957
Glue epoxy (EN-4900G)	Precious metals	0.290	mg	supplier	Glue or tape	Silver	7440-22-4		0.264	mg	910000	5737
				supplier	Glue or tape	Cresol Novolac Epoxy Resins	Proprietary		0.003	mg	10000	63
				supplier	Glue or tape	Bisphenol A Diacrylate	Proprietary		0.015	mg	50000	315
				supplier	Glue or tape	Dicyclopentenyl group containing Acrylate	Proprietary		0.006	mg	20000	126
				supplier	Glue or tape	Polybutadiene epoxidized derivative	Proprietary		0.003	mg	10000	63
Bonding wire (Cu)	Precious metals	0.180	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.175	mg	971500	3802
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.005	mg	25000	98
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.001	mg	3500	14
Encapsulation (EME-G631H)	Other inorganic materials	34.083	mg	supplier	Molding Compound	Epoxy resin	Proprietary		2.045	mg	60000	44456
				supplier	Molding Compound	Phenol Resin	Proprietary		1.022	mg	30000	22228
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		27.266	mg	800000	592748
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		3.408	mg	100000	74093
				supplier	Molding Compound	Carbon black	1333-86-4		0.341	mg	10000	7409
External Plating (Sn)	Other Nonferrous metals & alloys	0.300	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		0.300	mg	999900	6521
				supplier	Matte Sn	Impurities	Proprietary		0.000	mg	100	1