



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*	2024-07-30
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

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.

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.			



Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
STM32C051C8U6	20MI*44CXXXA	A	9991	2024-07-30
Amount	Unit of measure	Unit type	ST ECOPACK grade	
93	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	7x7	48	Flat	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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 :						Mfr Item Name	20MI*44CXXXA		93.0000		6000000.0	1000000.0
note : Substance present with less 0.001mg will not be declared in this document												
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	12075
				supplier	metallization	Aluminium (Al)	7429-90-5		0.001	mg	999	12
				supplier	metallization	Copper (Cu)	7440-50-8		0.010	mg	8991	111
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	2997	37
				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	2248	28
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5744	71
Leadframe (C7025 + Ag)	Copper & its alloys	55.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		51.920	mg	944000	558280
				supplier	Leadframe	Silver (Ag)	7440-22-4		0.825	mg	15000	8871
				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.096	mg	1750	1035
				supplier	Leadframe	Silicon (Si)	7440-21-3		0.399	mg	7250	4288
				supplier	Leadframe	Nickel (Ni)	7440-02-0		1.760	mg	32000	18925
				supplier	Leadframe	Silver (Ag)	7440-22-4		0.264	mg	910000	2838
Glue Epoxy (EN-4900G')	Precious metals	0.290	mg	supplier	Glue or tape	Cresol Novolac Epoxy Resins	Proprietary		0.003	mg	10000	31
				supplier	Glue or tape	Bisphenol A Diacrylate	Proprietary		0.015	mg	50000	156
				supplier	Glue or tape	Dicyclopentenyl group containing Acrylate	Proprietary		0.006	mg	20000	62
				supplier	Glue or tape	Polybutadiene epoxidized derivative	Proprietary		0.003	mg	10000	31
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.408	mg	971500	4387
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.011	mg	25000	113
Encapsulation (EME-G631H)	Other inorganic materials	35.643	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.001	mg	3500	16
				supplier	Molding Compound	Epoxy resin	Proprietary		2.139	mg	60000	22995
				supplier	Molding Compound	Phenol Resin	Proprietary		1.069	mg	30000	11498
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		28.514	mg	800000	306606
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		3.564	mg	100000	38326
				supplier	Molding Compound	Carbon black	1333-86-4		0.356	mg	10000	3833
External Plating (Sn)	Other Nonferrous metals & alloys	0.500	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		0.500	mg	999900	5376
				supplier	Matte Sn	Impurities	Proprietary		0.000	mg	100	1