



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*	2024-09-10
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
STM32C091KCU6	20MG*44DXXXXA	A	9991	2024-09-10
	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*44DXXA		46.1116		600000.0	100000.0
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	1.642	mg	supplier	die	Silicon (Si)	7440-21-3		1.608	mg	979021	34869
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	999	36
				supplier	metallization	Copper (Cu)	7440-50-8		0.015	mg	8991	320
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.005	mg	2997	107
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2248	80
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	5744	205
Leadframe (C7025 + Ag)	Copper & its alloys	10.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		9.440	mg	944000	204721
				supplier	Leadframe	Silver (Ag)	7440-22-4		0.150	mg	15000	3253
				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.018	mg	1750	380
				supplier	Leadframe	Silicon (Si)	7440-21-3		0.073	mg	7250	1572
				supplier	Leadframe	Nickel (Ni)	7440-02-0		0.320	mg	32000	6940
				supplier	Leadframe	Silver	7440-22-4		0.378	mg	910000	8195
Glue epoxy (EN-4900G)	Precious metals	0.415	mg	supplier	Glue or tape	Cresol Novolac Epoxy Resins	Proprietary		0.004	mg	10000	90
				supplier	Glue or tape	Bisphenol A Diacrylate	Proprietary		0.021	mg	50000	450
				supplier	Glue or tape	Dicyclopentenyl group containing Acrylate	Proprietary		0.008	mg	20000	180
				supplier	Glue or tape	Polybutadiene epoxidized derivative	Proprietary		0.004	mg	10000	90
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.186	mg	971500	4024
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.005	mg	25000	104
Encapsulation (EME-G631H)	Other inorganic materials	33.563	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.001	mg	3500	14
				supplier	Molding Compound	Epoxy resin	Proprietary		2.014	mg	60000	43672
				supplier	Molding Compound	Phenol Resin	Proprietary		1.007	mg	30000	21836
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		26.850	mg	800000	582292
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		3.356	mg	100000	72787
				supplier	Molding Compound	Carbon black	1333-86-4		0.336	mg	10000	7279
External Plating (Sn)	Other Nonferrous metals & alloys	0.300	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		0.300	mg	999900	6505
				supplier	Matte Sn	Impurities	Proprietary		0.000	mg	100	1