



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*	2024-11-28
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
STM32C051K8U7	22MG*44CXXXA	A	9991	2024-11-28
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
,	#N/A			



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	22MG*44CXXA		177.6063		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	3.688	mg	supplier	die	Silicon (Si)	115-86-6		3.362	mg	911738	18932				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	4032	84				
				supplier	metallization	Copper (Cu)	7440-50-8		0.139	mg	37634	781				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	12097	251				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	448	9				
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	448	9				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.035	mg	9409	195				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.089	mg	24194	502				
				Glue epoxy (EN4900GC)	Other Organic Materials	0.213	mg	supplier	Organic Compounds	Acrylic resin	Proprietary		0.015	mg	70000	84
								supplier	Organic Compounds	Polybutadiene derivative	Proprietary		0.004	mg	20000	24
supplier	Organic Compounds	Butadiene copolymer	Proprietary						0.003	mg	15000	18				
supplier	Organic Compounds	Acrylate	Proprietary						0.012	mg	54000	65				
supplier	Organic Compounds	Epoxy resin	Proprietary						0.006	mg	30000	36				
supplier	Organic Compounds	Peroxide	Proprietary						0.002	mg	8000	10				
supplier	Organic Compounds	Additive	Proprietary						0.004	mg	18000	22				
supplier	Metals	Silver	7440-22-4						0.168	mg	785000	944				
Encapsulation (EME-G700LAL-A)	Other Organic Materials	121.241	mg	supplier	Organic Compounds	Epoxy Resin	Proprietary		6.668	mg	55000	37545				
				supplier	Organic Compounds	Phenol Resin	Proprietary		2.546	mg	21000	14335				
				supplier	Glass	Silica(Amorphous)A	60676-86-0		96.993	mg	800000	546113				
				supplier	Glass	Silica(Amorphous)B	7631-86-9		14.428	mg	119000	81234				
				supplier	Organic Compounds	Carbon Black	1333-86-4		0.606	mg	5000	3413				
Bonding Wire (Cu)	Bonding Wire	0.385	mg	supplier	Metals	Copper	7440-50-8		0.372	mg	965500	2093				
				supplier	Metals	Palladium	7440-05-3		0.012	mg	31000	67				
				supplier	Metals	Gold	7440-57-5		0.001	mg	3500	8				
Plating anode (Sn)	Other inorganic materials	1.078	mg	supplier	Metals	Tin	7440-31-5		1.078	mg	1000000	6072				
Leadframe (C194 + Ag)	Copper & its alloys	51.000	mg	supplier	Metals	Copper	7440-50-8		49.595	mg	972450	279241				
				supplier	Metals	Iron	7439-89-6		1.153	mg	22600	6490				
				supplier	Metals	Zinc	7440-66-6		0.077	mg	1500	431				
				supplier	Metals	Phosphorus	7723-14-0		0.015	mg	300	86				
				supplier	Metals	Silver	7440-22-4		0.158	mg	3100	890				
				SVHC	Metals	Lead	7439-92-1		0.003	mg	50	14				