



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*	2024-07-15
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.			



Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
STM32C051K8T6	205V*44CXXXA	A	9991	2024-07-15
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	180	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	
QFP	7x7	32	Gull wing	
Comment	Package : 5V LQFP 32 7x7x1.4 1 0060661			

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	205V*44CXXXA		180.0331		600000.0	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	2.841	mg	supplier	die	Silicon (Si)	7440-21-3		2.730	mg	961111	15166				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	1944	31				
				supplier	metallization	Copper (Cu)	7440-50-8		0.047	mg	16389	259				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.015	mg	5278	83				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	278	4				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	278	4				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	4167	66				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.030	mg	10555	167				
				Leadframe (C7025 + Ag)	Copper & its alloys	72.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		68.940	mg	957500	382930
								supplier	Leadframe	Nickel (Ni)	7440-02-0		2.146	mg	29800	11918
supplier	Leadframe	Silicon (Si)	7440-21-3						0.468	mg	6500	2600				
supplier	Leadframe	Magnesium (Mg)	7439-95-4						0.108	mg	1500	600				
supplier	Leadframe	Silver (Ag)	7440-22-4						0.338	mg	4700	1880				
Glue epoxy (EN-4900G)	Precious metals	0.552	mg	supplier	Glue or tape	Silver	7440-22-4		0.436	mg	790000	2423				
				supplier	Glue or tape	Cresol Novolac Epoxy Resins	Proprietary		0.014	mg	25000	77				
				supplier	Glue or tape	Bisphenol A Diacrylate	Proprietary		0.028	mg	50000	153				
				supplier	Glue or tape	Dicyclopenteny group containing Acrylate	Proprietary		0.030	mg	55000	169				
				supplier	Glue or tape	Butadiene copolymer	Proprietary		0.006	mg	10000	31				
				supplier	Glue or tape	Polybutadiene epoxidized derivative	Proprietary		0.030	mg	55000	169				
				supplier	Glue or tape	Peroxy Ketals	Proprietary		0.003	mg	5000	15				
				supplier	Glue or tape	Substitutedalkoxyalkyl trimethoxysilane	Proprietary		0.003	mg	5000	15				
				supplier	Glue or tape	Methacrylate multialkoxysubstitutedalkyl ester	Proprietary		0.003	mg	5000	15				
				Bonding wire (Cu)	Precious metals	0.240	mg	supplier	Bonding wire	Copper	7440-50-8		0.232	mg	965500	1287
supplier	Bonding wire	Palladium	7440-05-3						0.007	mg	31000	41				
supplier	Bonding wire	Golden	7440-57-5						0.001	mg	3500	5				
Encapsulation (EME-G631SH)	M-011 Other inorganic materials	100.000	mg	supplier	Molding Compound	2,2'-((3,3',5,5'-Tetramethyl-(1,1'-biphenyl)-4,4'-diylidene)bis(2-methylpropane-2-thiol))	85954-11-6		4.000	mg	40000	22218				
				supplier	Molding Compound	Epoxy resin	Proprietary		2.000	mg	20000	11109				
				supplier	Molding Compound	Phenol Resin	Proprietary		7.500	mg	75000	41659				
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		70.950	mg	709500	394094				
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		15.000	mg	150000	83318				
				supplier	Molding Compound	Carbon black	1333-86-4		0.550	mg	5500	3055				
External Plating (Sn)	M-011 Other inorganic materials	4.400	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		4.400	mg	999900	24438				
				supplier	Matte Sn	Impurities	Proprietary		0.000	mg	100	2				