



## 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*	2024-11-05
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 : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
STM32U385VGT6Q	221L*454XXXZ	A	9991	2024-11-05
Amount	Unit of measure	Unit type	ST ECOPACK grade	
681	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	14x14	100	Gull wing	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

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	221L*454XXXZ		681.4400		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	8.861	mg	supplier	die	Silicon (Si)	7440-21-3		8.375	mg	945164	12290
				supplier	metallization	Aluminium (Al)	7429-90-5		0.054	mg	6053	79
				supplier	metallization	Copper (Cu)	7440-50-8		0.160	mg	18037	235
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	121	2
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.028	mg	3147	41
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	726	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	121	2
				supplier	Passivation	Silicon Nitride	12033-89-5		0.039	mg	4358	57
				supplier	Passivation	Silicon Oxide	7631-86-9		0.197	mg	22273	290
				Leadframe (C7025 + Ag)	Copper & its alloys	190.000	mg	supplier	Leadframe	Copper (Cu)	7440-50-8	
supplier	Leadframe	Silver (Ag)	7440-22-4						2.850	mg	15000	4182
supplier	Leadframe	Magnesium (Mg)	7439-95-4						0.333	mg	1750	488
supplier	Leadframe	Silicon (Si)	7440-21-3						1.378	mg	7250	2021
supplier	Leadframe	Nickel (Ni)	7440-02-0						6.080	mg	32000	8922
Glue Epoxy (CRM-1076WA)	Precious metals	0.860	mg	supplier	Glue or tape	Silver Powder	7440-22-4		0.644	mg	749000	945
				supplier	Glue or tape	Bisphenol F Type Epoxy Resin	9003-36-5		0.026	mg	30000	38
				supplier	Glue or tape	Epoxy resin	Proprietary		0.065	mg	75000	95
				supplier	Glue or tape	Diluent	Proprietary		0.026	mg	30000	38
				supplier	Glue or tape	Ethylene dimethacrylate	97-90-5		0.065	mg	75000	95
				supplier	Glue or tape	1,4-Cyclohexanedimethanol diglycidyl ether	14228-73-0		0.026	mg	30000	38
				supplier	Glue or tape	Dicyandiamide	461-58-5		0.005	mg	5500	7
				supplier	Glue or tape	1,1-Di(t-butylperoxy)cyclohexane	3006-86-8		0.005	mg	5500	7
Bonding wire (Cu)	Precious metals	1.090	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		1.052	mg	965500	1544
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.034	mg	31000	50
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.004	mg	3500	6
Encapsulation (EME-G631SH)	Other inorganic materials	480.329	mg	supplier	Molding Compound	Epoxy resin	Proprietary		28.820	mg	60000	42292
				supplier	Molding Compound	Phenol Resin	Proprietary		14.410	mg	30000	21146
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		384.263	mg	800000	563899
				supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		48.033	mg	100000	70487
				supplier	Molding Compound	Carbon black	1333-86-4		4.803	mg	10000	7049
External Plating (Sn)	Other Nonferrous metals & alloys	0.300	mg	supplier	Matte Sn	Tin (Sn)	7440-31-5		0.300	mg	999900	440
				supplier	Matte Sn	Impurities	Proprietary		0.000	mg	100	0