



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field


Supplier Information			
Company Name *	STMicroelectronics	Response Date *	29-06-2021
Company Unique ID	NL 008751171B01		
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 MD CHAMPION	Representative Title	MDG MD 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
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L4Q5VGT6P	E31L*471XXXZ	A	9991	29-06-2021
	Amount	UoM	Unit type	ST ECOPACK Grade
	681.44	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	100	L bend	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	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-25th June 2020				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	E31L*471XXXZ				6000006.3	999998.6
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	17.899	mg	supplier	die	Silicon (Si)	7440-21-3		17.219	mg	962009	25269
				supplier	metallization	Aluminium (Al)	7429-90-5		0.033	mg	1844	48
				supplier	metallization	Copper (Cu)	7440-50-8		0.288	mg	16090	423
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	56	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.093	mg	5196	136
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	168	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	112	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.073	mg	4078	107
				supplier	Passivation	Silicon Oxide	7631-86-9		0.187	mg	10448	274
				Leadframe Lf# C7025	Copper & its alloys	190.000	mg		Leadframe	Copper (Cu)	7440-50-8	
	Leadframe	Nickel (Ni)	7440-02-0						6.080	mg	32000	8922
	Leadframe	Silicon (Si)	7440-21-3						1.378	mg	7253	2022
	Leadframe	Magnesium (Mg)	7439-95-4						0.333	mg	1753	489
	Leadframe	Silver (Ag)	7440-22-4						2.850	mg	15000	4182
	Glue or tape	Silver Powder	7440-22-4						2.732	mg	758889	4009
Glue (sumitomo crm-1076wa)	Precious metals	3.600	mg		Glue or tape	Bisphenol F Type Epoxy Resin	9003-36-5		0.108	mg	30000	158
					Glue or tape	Epoxy resin	Trade Secret		0.234	mg	65000	343
					Glue or tape	Diluent	Trade Secret		0.108	mg	30000	158
					Glue or tape	Ethylene dimethacrylate	97-90-5		0.270	mg	75000	396
					Glue or tape	1,4-Cyclohexanedimethanol diglycidyl ether	14228-73-0		0.108	mg	30000	158
					Glue or tape	Dicyandiamide	461-58-5		0.020	mg	5556	29
					Glue or tape	1,1-Di(t-butylperoxy)cyclohexane	3006-86-8		0.020	mg	5556	29
					Bonding wire	Au	7440-57-5		1.878	mg	988421	2756
Bonding Wire (Au 0.8 Mills)	Precious metals	1.900	mg		Bonding wire	Palladium	7440-05-3		0.022	mg	11579	32
					Molding Compound	Epoxy Resin A	Proprietary		8.943	mg	20000	13124
					Molding Compound	Epoxy Resin B	Proprietary		8.943	mg	20000	13124
					Molding Compound	Phenol Resin	Proprietary		24.593	mg	55001	36090
					Molding Compound	Carbon Black	1333-86-4		2.459	mg	5499	3609
					Molding Compound	Silica(Amorphous) A	60676-86-0		335.131	mg	749499	491798
Encapsulation (Sumitomo,Eme-G631S)	M-011 Other inorganic materials	447.140	mg		Molding Compound	Silica(Amorphous) B	7631-86-9		67.071	mg	150000	98425
					Matte Sn	Tin (Sn)	7440-31-5		20.898	mg	999904	30667
					Matte Sn	Impurities	Proprietary		0.002	mg	96	3
					External Plating	M-011 Other inorganic materials	20.900	mg				