



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 *	2022-04-04
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 *	Material Declaration champion	Representative Title	Material Declaration champion
Representative Phone *	Refer to Supplier Comment section		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	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	Mfr Site	Date
STM32L4S9ZIJ6	Q148*470XXXV	A	9996	2022-04-04
	Amount	UoM	Unit type	ST ECOPACK Grade
	155.30	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	NAC	Copper Alloy	Sn3.5Ag	

Package Designator	Size	Nbr of instances	Shape	
BGA	10x10	144	bulk solder	
Comment	Package : A02Y UFBGA 10X10 144L P 0.8 MM 8526251			

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 - 8th July 2021				
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 :						Mfr Item Name	Q148*470XXV				6000000.0	1000004.4
note : Substance present with less 0.001mg will not be declared in this document												
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	4.904	mg	supplier	die	Silicon (Si)	7440-21-3		3.966	mg	808728	25538
				supplier	metallization	Aluminium (Al)	7429-90-5		0.045	mg	9176	290
				supplier	metallization	Copper (Cu)	7440-50-8		0.397	mg	80954	2556
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	204	6
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.129	mg	26305	831
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1020	32
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	612	19
				supplier	Passivation	Silicon Nitride	12033-89-5		0.101	mg	20595	650
				supplier	Passivation	Silicon Oxide	7631-86-9		0.257	mg	52406	1655
				Substrate (DS-7409HGB)	M-011 Other inorganic materials	38.510	mg	supplier	CORE	Glass Cloth	65997-17-3	
supplier	CORE	Epoxy	28906-96-9						2.011	mg	52215	12948
supplier	CORE	Heat Resistant Resin	25722-66-1						2.011	mg	52215	12948
supplier	CORE	Silica Filler	7631-86-9						2.011	mg	52215	12948
supplier	CORE	Resistant Epoxy Resin	223769-10-6						2.011	mg	52215	12948
supplier	CORE	Metal Hydroxide	Proprietary						1.097	mg	28481	7063
supplier	COPPER FOIL	Copper (Cu)	7440-50-8						7.920	mg	205661	50999
supplier	SOLDERMASK (AUS320)	Solvent naphtha (petroleum), Heavy arom.	64742-94-5						2.844	mg	73852	18314
supplier	SOLDERMASK (AUS320)	Naphthalene	91-20-3						0.300	mg	7781	1929
supplier	SOLDERMASK (AUS320)	Phosphin oxide derivative	Proprietary						0.104	mg	2688	667
supplier	SOLDERMASK (AUS320)	Talc containing no asbestiform fibers	14807-96-6						0.775	mg	20131	4992
supplier	SOLDERMASK (AUS320)	Barium sulfate	7727-43-7						1.292	mg	33557	8322
supplier	SOLDERMASK (AUS320)	Dipropylene glycol monomethyl ether	34590-94-8						0.775	mg	20131	4992
supplier	NI PLATING	Nickel (Ni)	7440-02-0						5.790	mg	150351	37284
supplier	AU PLATING	Gold (Au)	7440-57-5						0.430	mg	11166	2769
Glue (EM-760L2-P)	M-011 Other inorganic materials	0.803	mg					supplier	GLUE	Acrylic Resin	Proprietary	
				supplier	GLUE	Amorphous Silica	7631-86-9		0.402	mg	500000	2585
				supplier	GLUE	Phenol Resin	Proprietary		0.080	mg	100000	517
Wire (Au Wire HP)	M-011 Other inorganic materials	1.065	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.065	mg	1000000	6855
Solderball (Sn3.5Ag)	M-011 Other inorganic materials	8.733	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		8.427	mg	965000	54267
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.306	mg	35000	1968
Encapsulation (GE-100LFC5)	M-011 Other inorganic materials	101.282	mg	supplier	MOLDING COMPOUND	Solid Epoxy Resin	Proprietary		5.064	mg	50000	32609
				supplier	MOLDING COMPOUND	Hardener	Proprietary		2.026	mg	20000	13044
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		1.013	mg	10000	6522
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		2.026	mg	20000	13044
				supplier	MOLDING COMPOUND	Amorphous silica	60676-86-0		91.154	mg	900000	586970