



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*	2025-03-10
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
STM32WL31C8V6	F8M2*4L0XXXB	A	P1C7	2025-03-10
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	106	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0	
Package designator	Package size	Number of instances	Shape	
QFN	6x6	48	Flat	
Comment	Package : A0BE VFQFPN 6x6x0.9 48L PITCH 0.4 8205966			

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-21st January 2025				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	F8M2*4L0XXB		106.3864		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	6.515	mg	supplier	die	Silicon (Si)	7440-21-3		6.231	mg	956408	58570
				supplier	metallization	Aluminium (Al)	7429-90-5		0.014	mg	2149	132
				supplier	metallization	Copper (Cu)	7440-50-8		0.120	mg	18419	1128
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.039	mg	5986	367
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	153	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	153	9
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	4758	291
				supplier	Passivation	Silicon Oxide	7631-86-9		0.078	mg	11972	733
Leadframe (C194)	Copper & its alloys	51.165	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		50.029	mg	977802	470257
				supplier	Leadframe	Iron (Fe)	7439-89-6		1.083	mg	21169	10181
				supplier	Leadframe	Zinc (Zn)	7440-66-6		0.049	mg	962	462
				supplier	Leadframe	Phosphorus (P)	7723-14-0		0.003	mg	67	32
				supplier	Glue or tape	Silver (Ag)	7440-22-4		0.756	mg	800000	7106
Glue epoxy (8290)	Precious metals	0.945	mg	supplier	Glue or tape	Bisphenol F type epoxy resin	9003-36-5		0.076	mg	80000	711
				supplier	Glue or tape	Epoxy resin	68475-94-5		0.028	mg	30000	266
				supplier	Glue or tape	Diglycidyl phenyl allyl ether	EC417-470-1		0.028	mg	30000	266
				supplier	Glue or tape	Other			0.028	mg	30000	266
				supplier	Glue or tape	Polyoxypropylenediamine	9046-10-0		0.028	mg	30000	266
				supplier	Bonding wire	Copper (Cu)	7440-50-8		0.290	mg	951663	2724
Bonding wire (CuPd)	Precious metals	0.305	mg	supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.012	mg	40855	117
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.002	mg	7481	21
				supplier	Molding Compound	Silica vitreous	60676-86-0		41.390	mg	880000	389053
				supplier	Molding Compound	Biphenyl epoxy resin	85954-11-6		2.352	mg	50000	22105
Encapsulation (CEL 9240ZHF10W)	M-011 Other inorganic materials	47.034	mg	supplier	Molding Compound	Phenolic resin	205830-20-2		1.834	mg	39000	17242
				supplier	Molding Compound	Epoxy type resin A	Proprietary		0.941	mg	20000	8842
				supplier	Molding Compound	Epoxy type resin B	Proprietary		0.423	mg	9000	3979
				supplier	Molding Compound	Carbon black	1333-86-4		0.094	mg	2000	884
				supplier	Plating	Nickel (Ni)	7440-02-0		0.389	mg	918899	3656
External Plating (Ni/Pd/Au)	M-011 Other inorganic materials	0.423	mg	supplier	Plating	Palladium (Pd)	7440-05-3		0.029	mg	69333	276
				supplier	Plating	Gold (Au)	7440-57-5		0.005	mg	11768	47