



Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2025-03-24
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
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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
STM32L486VGT3	5E1L*415XXX4	A	9998	2025-03-24
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	678	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-21st January 2025				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	5E1L*415XXX4		677.6798		7000000.0	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	16.755	mg	supplier	die	Silicon (Si)	7440-21-3		16.094	mg	960597	23749.38				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.031	mg	1876	46.38				
				supplier	metallization	Copper (Cu)	7440-50-8		0.280	mg	16686	412.54				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	67	1.66				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.091	mg	5428	134.20				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	201	4.97				
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	134	3.31				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.071	mg	4222	104.38				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	10789	266.74				
				supplier	ALLOY	Copper (Cu)	7440-50-8		149.243	mg	975000	220226.20				
Leadfram (C194 + Ag)	Copper and its alloy	153.070	mg	supplier	ALLOY	Iron (Fe)	7439-89-6		3.597	mg	23500	5308.02				
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.184	mg	1200	271.05				
				supplier	ALLOY	Metallic Phosphorus (P)	7723-14-0		0.046	mg	300	67.76				
				supplier	COATING	Silver (Ag)	7440-22-4		5.288	mg	1000000	7802.36				
Leadframe platin (Ag)	M-011 Other inorganic materials	5.288	mg	supplier	GLUE	Silver (Ag)	7440-22-4		0.591	mg	766500	872.70				
				supplier	GLUE	2,2'-(Methylenebis(phenyleneoxymethylene))bisox	39817-09-9		0.058	mg	75000	85.39				
				supplier	GLUE	Organic anhydride	26544-38-7		0.058	mg	75000	85.39				
				supplier	GLUE	1,3-Di-2-propenyl-2-(2-propenyloxy) benzene, ep	Proprietary		0.023	mg	30000	34.16				
				supplier	GLUE	Epoxide	3234-28-4		0.023	mg	30000	34.16				
				supplier	GLUE	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.014	mg	17500	19.92				
				supplier	GLUE	Copper oxide	1317-38-0		0.001	mg	1000	1.14				
				supplier	GLUE	Maleic anhydride	108-31-6		0.004	mg	5000	5.69				
				Bonding Wire (Cu)	M-011 Other inorganic materials	1.182	mg	supplier	BONDING WIRE	Copper (Cu)	7440-50-8		1.141	mg	964990	1683.62
								supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.035	mg	30000	52.34
supplier	BONDING WIRE	Silver (Ag)	7440-22-4						0.000	mg	10	0.02				
supplier	BONDING WIRE	Gold (Au)	7440-57-5						0.006	mg	5000	8.72				
Encapsulation (G631HQ)	M-011 Other inorganic materials	495.854	mg	supplier	MOLDING COMPOUND	Epoxy Resin A	Proprietary		4.959	mg	10000	7316.94				
				supplier	MOLDING COMPOUND	Epoxy Resin B	Proprietary		4.959	mg	10000	7316.94				
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		24.793	mg	50000	36584.68				
				supplier	MOLDING COMPOUND	Silica(Amorphous) A	60676-86-0		406.600	mg	820000	59988.70				
				supplier	MOLDING COMPOUND	Silica(Amorphous) B	7631-86-9		49.585	mg	100000	73169.35				
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		4.959	mg	10000	7316.94				
External Plating (Sn)	M-011 Other inorganic materials	4.760	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		4.760	mg	1000000	7024.26				