



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*	2025-03-05
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 : http://www.st.com/web/en/support/support.html		

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
STM32H523RCT6	645W*478XXXA	A	998Z	2025-03-05
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	364	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	10x10	64	Gull wing	
Comment	Package : 5W LQFP 64 10x10x1.4 1 0051434			

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	645W*478XXXA		363.6380		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	7.769	mg	supplier	die	Silicon (Si)	7440-21-3		7.485	mg	963493	20583.72
				supplier	metallization	Aluminium (Al)	7429-90-5		0.033	mg	4302	91.91
				supplier	metallization	Copper (Cu)	7440-50-8		0.106	mg	13584	290.20
				supplier	passivation	Nickel (Ni)	7440-02-0		0.000	mg	57	1.22
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.017	mg	2207	47.15
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	396	8.46
				supplier	metallization	Tungsten (W)	7440-33-7		0.000	mg	57	1.22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.124	mg	15904	339.77
				Glue epoxy (EN4900GC)	Other Organic Materials	0.399	mg	supplier	Organic Compounds	Acrylic resin	Proprietary	
supplier	Organic Compounds	Polybutadiene derivative	Proprietary						0.008	mg	20000	21.93
supplier	Organic Compounds	Butadiene copolymer	Proprietary						0.006	mg	15000	16.45
supplier	Organic Compounds	Acrylate	Proprietary						0.022	mg	54000	59.21
supplier	Organic Compounds	Epoxy resin	Proprietary						0.012	mg	30000	32.89
supplier	Organic Compounds	Peroxide	Proprietary						0.003	mg	8000	8.77
supplier	Organic Compounds	Additive	Proprietary						0.007	mg	18000	19.74
supplier	Metals	Silver	7440-22-4						0.313	mg	785000	860.69
Encapsulation (EME-G700LAL-A)	Other Organic Materials	248.945	mg					supplier	Organic Compounds	Epoxy Resin	Proprietary	
				supplier	Organic Compounds	Phenol Resin	Proprietary		5.228	mg	21000	14376.53
				supplier	Glass	Silica(Amorphous)A	60676-86-0		199.156	mg	800000	547677.23
				supplier	Glass	Silica(Amorphous)B	7631-86-9		29.624	mg	119000	81466.99
				supplier	Organic Compounds	Carbon Black	1333-86-4		1.245	mg	5000	3422.98
				supplier	Metals	Copper	7440-50-8		0.760	mg	965500	2090.91
Bonding wire (Cu)	Bonding Wire	0.788	mg	supplier	Metals	Palladium	7440-05-3		0.024	mg	31000	67.13
				supplier	Metals	Gold	7440-57-5		0.003	mg	3500	7.58
				supplier	Metals	Tin	7440-31-5		1.438	mg	1000000	3954.10
Plating anode (Sn)	Other inorganic materials	1.438	mg	supplier	Metals	Copper	7440-50-8		101.536	mg	973499	279222.56
Leadframe (C7025 + Ag)	Copper & its alloys	104.300	mg	supplier	Metals	Iron	7439-89-6		2.377	mg	22790	6536.71
				supplier	Metals	Phosphor	7723-14-0		0.026	mg	250	71.71
				supplier	Metals	Zinc	7440-66-6		0.131	mg	1260	361.40
				supplier	Metals	Silver	7440-22-4		0.229	mg	2200	631.01
				supplier	SVHC	Metals	Lead	7439-92-1		0.000	mg	1