



## 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*	2025-04-24
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 : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
STM32H745ZGT6	481A*450XXXV	A	9998	2025-04-24
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1304	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	20x20	144	Gull wing	
Comment	Package : 1A LQFP 144 20X20X1.4 2 0099183			

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	481A*450XXV		1303.6996		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	15.697	mg	supplier	die	Silicon (Si)	7440-21-3		14.955	mg	952729	11471.19
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	5606	67.50
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	17583	211.71
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	64	0.77
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	2867	34.52
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	510	6.14
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	64	0.77
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	20577	247.75
				supplier	ALLOY	Copper (Cu)	7440-50-8		231.059	mg	962000	177233.56
Leadframe (C7025)	Copper and its alloy	240.186	mg	supplier	ALLOY	Nickel (Ni)	7440-02-0		7.206	mg	30000	5527.03
				supplier	ALLOY	Silicon (Si)	7440-21-3		1.561	mg	6500	1197.52
				supplier	ALLOY	Magnesium (Mg)	7439-95-4		0.360	mg	1500	276.35
				supplier	COATING	Silver(Ag)	7440-22-4		1.280	mg	1000000	981.97
Leadframe (Ag Plating)	Other inorganic materials	1.280	mg	supplier	glue	Silver (Ag)	7440-22-4		0.891	mg	766500	683.19
				supplier	glue	2,2-[Methylenebis(phenyleneoxymethylene)]bisox	39817-09-9		0.087	mg	75000	66.85
				supplier	glue	Organic anhydride	26544-38-7		0.087	mg	75000	66.85
				supplier	glue	1,3-Di-2-propenyl-2-(2-propenyl)oxy benzene, etc	Proprietary		0.035	mg	30000	26.74
				supplier	glue	Epoxide	3234-28-4		0.035	mg	30000	26.74
				supplier	glue	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.020	mg	17500	15.60
				supplier	glue	Copper oxide	1317-38-0		0.001	mg	1000	0.89
				supplier	glue	Maleic anhydride	108-31-6		0.006	mg	5000	4.46
Bonding Wire (Cu)	M-011 Other inorganic materials	2.264	mg	supplier	bonding wire	Copper (Cu)	7440-50-8		2.184	mg	964999.65	1675.48
				supplier	bonding wire	Palladium (Pd)	7440-05-3		0.068	mg	30000.3	52.09
				supplier	bonding wire	Gold (Au)	7440-57-5		0.011	mg	5000.050001	8.68
				supplier	MOLDING COMPOUND	Epoxy Resin A	Proprietary		10.353	mg	10000	7940.88
Encapsulation (G631SHQ)	M-011 Other inorganic materials	1035.252	mg	supplier	MOLDING COMPOUND	Epoxy Resin B	Proprietary		10.353	mg	10000	7940.88
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		51.763	mg	50000	39704.41
				supplier	MOLDING COMPOUND	Silica(Amorphous) A	60676-86-0		812.673	mg	785000	623359.22
				supplier	MOLDING COMPOUND	Silica(Amorphous) B	7631-86-9		144.935	mg	140000	111172.34
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		5.176	mg	5000	3970.44
				supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		7.858	mg	1000000	6027.46
Finishing (Sn)	M-011 Other inorganic materials	7.858	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		7.858	mg	1000000	6027.46