



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*	2025-03-31
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
STM32U385RGY6QTR	T16H*454XXXZ	A	996S	2025-03-31
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	11	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
1	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Tin/Silver/Copper (SAC405)	Not Applicable	NAC	0	
Package designator	Package size	Number of instances	Shape	
WLCSP	NA	68	Bulk solder	
Comment	Package : B0JP WLCSP 68 BALLS DIE 454 P0.35 DM00833592			

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	T16H*454XXXZ	11.3846		9000000.0	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	7.844	mg	supplier	die	Silicon (Si)	7440-21-3		7.543	mg	961672	662592.90
				supplier	metallization	Aluminium (Al)	7429-90-5		0.033	mg	4229	2913.78
				supplier	metallization	Copper (Cu)	7440-50-8		0.099	mg	12619	8694.50
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	67	46.16
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.017	mg	2148	1479.97
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	537	369.99
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	67	46.16
				supplier	Passivation	Silicon Nitride	12033-89-5		0.024	mg	3021	2081.47
				supplier	Passivation	Silicon Oxide	7631-86-9		0.123	mg	15640	10775.97
				supplier	Alloy	Ti	7440-32-6		0.001	mg	200963.1248	86.51
Plating Seed layer 1	Other inorganic materials	0.005	mg	supplier	Alloy	Cu	7440-50-8		0.004	mg	799036.8752	343.89
				supplier	Alloy	Cu	7440-50-8		0.176	mg	1000000	15459.48
UBM (Cu)	Other inorganic materials	0.176	mg	supplier	Alloy	Cu	7440-50-8		0.176	mg	1000000	15459.48
				supplier	Polymer	Proprietary polymer	Proprietary		0.099	mg	900000	8672.24
Re-passivatipon layer (LTC9320 E19)	Other organic materials	0.110	mg	supplier	Polymer	Additives	Proprietary		0.011	mg	100000	963.58
				supplier	Alloy	Cu	7440-50-8		0.301	mg	1000000	26404.09
Redistribution Layer (Cu)	Other inorganic materials	0.012	mg	supplier	Alloy	Ti	7440-32-6		0.002	mg	200963.1248	210.10
				supplier	Alloy	Cu	7440-50-8		0.010	mg	799036.8752	835.17
				supplier	Polymer	Proprietary polymer	Proprietary		0.082	mg	900000	7241.36
Re-passivatipon layer (LTC9320 E19)	Other organic materials	0.092	mg	supplier	Polymer	Additives	Proprietary		0.009	mg	100000	804.60
				supplier	Solder	Sn	7440-31-5		2.342	mg	955000	205711.79
Solder ball (SAC405)	Solder	2.452	mg	supplier	Solder	Ag	7440-22-4		0.098	mg	4000	8616.20
				supplier	Solder	Cu	7440-50-8		0.012	mg	5000	1077.03
BSC (LC2850)	Other Organic Materials	0.394	mg	supplier	polymer	Polyethylene terephthalate	25038-59-9		0.256	mg	650000	22472.46
				supplier	polymer	Silicon dioxide	7631-86-9		0.077	mg	195000	6741.74
				supplier	polymer	Plastic: EP - Epoxide, Epoxy	Proprietary		0.030	mg	75000	2592.98
				supplier	polymer	Proprietary Material-Other acrylic resins	Proprietary		0.030	mg	75000	2592.98
				supplier	polymer	Carbon black	1333-86-4		0.002	mg	5000	172.87