



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*	2025-02-20
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
STM32U5F9BJY6QTR	E09G*476XXXZ	A	997C	2025-02-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	42	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	208	Bulk solder	
Comment	Package : B0KC WLCSP 208 BALLS DIE 476 P0.35 DM00856007			

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-7th November 2024				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	E09G*476XXXZ		42.1101		1000000.0	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	25.820	mg	supplier	die	Silicon (Si)	7440-21-3		24.828	mg	961581	589597.8388
				supplier	metallization	Aluminium (Al)	7429-90-5		0.110	mg	4261	2612.651863
				supplier	metallization	Copper (Cu)	7440-50-8		0.327	mg	12646	7753.953406
				supplier	metallization	Nickel (Ni)	7440-02-0		0.002	mg	69	42.30766922
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.056	mg	2165	1327.479766
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	550	337.2350445
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	69	42.30766922
				supplier	Passivation	Silicon Nitride	12033-89-5		0.078	mg	3024	1854.17959
				supplier	Passivation	Silicon Oxide	7631-86-9		0.404	mg	15635	9586.672584
				BSC (LC89R)		1.485	mg	supplier	Coating film	Silica	Proprietary	
supplier	Coating film	Epoxy resin	Proprietary						0.316	mg	213000	7509.076658
supplier	Coating film	Acrylic resin	Proprietary						0.316	mg	213000	7509.076658
Solder ball (SAC405)		8.552	mg	supplier	Solder ball	Tin	7440-31-5		8.168	mg	955000	193958.4928
				supplier	Solder ball	Silver	7440-22-4		0.342	mg	40000	8123.915929
				supplier	Solder ball	Copper	7440-50-8		0.043	mg	5000	1015.489491
				supplier	Repassivation polymer(LTC9320)	Other polymers	Proprietary		0.980	mg	1000000	23267.56147
RDL metallization(Ti)		0.033	mg	supplier	Runner/UBM (Metal Sputter)	Titanium	7440-32-6		0.033	mg	1000000	773.0369092
RDL metallization(Cu)		0.128	mg	supplier	Runner/UBM (Metal Sputter)	Copper	7440-50-8		0.128	mg	1000000	3044.576135
UBM metallization(Ti)		0.016	mg	supplier	Runner/UBM (Metal Sputter)	Titanium	7440-32-6		0.016	mg	1000000	386.5184546
UBM metallization(Cu)		0.064	mg	supplier	Runner/UBM (Metal Sputter)	Copper	7440-50-8		0.064	mg	1000000	1522.288067
RDL Copper		2.372	mg	supplier	RDL Copper	Copper	7440-50-8		2.372	mg	1000000	56324.65849
UBM Copper		2.660	mg	supplier	UBM Copper	Copper	7440-50-8		2.660	mg	1000000	63174.95479