



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*	2024-03-19
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
STM32WB09TEF6TR	61E0*4B1XXXZ	A	996S	2024-03-19
Amount	Unit of measure	Unit type	ST ECOPACK grade	
6	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	36	Bulk solder	
Comment	Package : B0LY WLCSP 36L P0.4 DIE 4B1 (FY02) DM00913670			

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-23rd January 2024				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
,	0			



Material Composition Declaration :						Mfr Item Name	61E0*4B1XXXZ		6.2457		900000.0	100000.0
note : Substance present with less 0.001mg will not be declared in this document												
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	4.266	mg	supplier	die	Silicon (Si)	7440-21-3		4.090	mg	958729	654792
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	1998	1365
				supplier	metallization	Copper (Cu)	7440-50-8		0.075	mg	17483	11941
				supplier	metallization	Cobalt (Co)	7440-48-4		0.000	mg	62	42
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.024	mg	5682	3881
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	187	128
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	125	85
				supplier	Passivation	Silicon Nitride	12033-89-5		0.019	mg	4433	3028
				supplier	Passivation	Silicon Oxide	7631-86-9		0.048	mg	11301	7718
				supplier	Alloy	Ti	7440-32-6		0.001	mg	200963	87
Plating Seed layer 1	Other inorganic materials	0.003	mg	supplier	Alloy	Cu	7440-50-8		0.002	mg	799037	345
UBM	Other inorganic materials	0.095	mg	supplier	Alloy	Cu	7440-50-8		0.095	mg	1000000	15259
Re-passivation layer (LTC9320)	Other organic materials	0.094	mg	supplier	Polymer	Proprietary Polymer	Proprietary		0.085	mg	900000	13531
				supplier	Polymer	Additives	Proprietary		0.009	mg	100000	1503
Redistribution Layer	Other inorganic materials	0.235	mg	supplier	Alloy	Cu	7440-50-8		0.235	mg	1000000	37658
Plating Seed layer 2	Other inorganic materials	0.009	mg	supplier	Alloy	Ti	7440-32-6		0.002	mg	200963	299
				supplier	Alloy	Cu	7440-50-8		0.007	mg	799037	1190
Re-passivation layer (LTC9320)	Other organic materials	0.084	mg	supplier	Polymer	Proprietary Polymer	Proprietary		0.076	mg	900000	12162
				supplier	Polymer	Additives	Proprietary		0.008	mg	100000	1351
Solder balls (SAC405)	Solder	1.122	mg	supplier	Solder	Sn	7440-31-5		1.071	mg	955000	171485
				supplier	Solder	Ag	7440-22-4		0.045	mg	40000	7183
				supplier	Solder	Cu	7440-50-8		0.006	mg	5000	898
BSC (LC89R25)	Other Organic Materials	0.338	mg	#N/A	polymer	Acrylic polymers	9065-11-6		0.338	mg	1000000	54070