



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*	2024-06-25
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
STM32N657A0H3QTR	E0DD*486ESXZ	A	9991	2024-06-25
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	96	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	
Tin/Silver/Copper (SAC305)	Not Applicable	NAC	0	
Package designator	Package size	Number of instances	Shape	
BGA	6x6	169	Bulk solder	
Comment	Package : B0LA FC VFBGA 6X6X1.0 169 P0.4 DM00884984			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EODD*486ESXZ		95.5416		5000000.0	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	5.000	mg	supplier	die	Silicon(Si)	7440-21-3		4.664	mg	932860	48820
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.003	mg	500	26
				supplier	metallisation	Arsenic(As)	7440-38-2		0.000	mg	4	0
				supplier	metallisation	Copper(Cu)	7440-50-8		0.249	mg	49763	2604
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.000	mg	29	2
				supplier	metallisation	Silver(Ag)	7440-22-4		0.001	mg	196	10
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.003	mg	500	26
				supplier	metallisation	Tin(Sn)	7440-31-5		0.053	mg	10667	558
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	108	6
				supplier	metallisation	Tungsten(W)	7440-33-7		0.003	mg	550	29
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.007	mg	1399	73
				supplier	passivation	Silicon Oxide	7631-86-9		0.017	mg	3424	179
				Substrate (A33024)	Copper & Resin	17.971	mg	Supplier	Solder Mask	Plastics PAK	Proprietary	
Supplier	Solder Mask	Barium sulphate	7727-43-7						0.187	mg	10416	1959
Supplier	Solder Mask	Plastic EP	Proprietary						0.120	mg	6696	1260
Supplier	Solder Mask	Silicon dioxide	7631-86-9						0.095	mg	5314	1000
Supplier	Solder Mask	Additives, not to declare	Proprietary						0.043	mg	2391	450
Supplier	Solder Mask	Talc	14807-96-6						0.029	mg	1594	300
Supplier	Solder Mask	Pigment portion, not to declare	Proprietary						0.006	mg	319	60
Supplier	Solder Mask	Inorganic Ingredient, not to declare	Proprietary						0.006	mg	319	60
Supplier	PP	Thermosetting resin (including filler)	Proprietary						4.001	mg	222657	41881
Supplier	PP	Glass Cloth	65997-17-3						2.155	mg	119892	22551
Supplier	Cu foil	Copper	7440-50-8						9.645	mg	536682	100949
Supplier	Cu Plating	Copper	7440-50-8						1.215	mg	67627	12721
Underfill (UA26)	Encapsulation Glue	1.500	mg					Supplier	Underfill	p-(2,3-epoxypropoxy)-N, N-bis(2,3-epoxypropyl)a	5026-74-4	
				Supplier	Underfill	Bisphenol F type liquid epoxy resin	9003-36-5		0.150	mg	100000	1570
				Supplier	Underfill	Bisphenol A type liquid epoxy resin	25068-38-6		0.045	mg	30000	471
				Supplier	Underfill	Amine type hardener	Proprietary		0.105	mg	70000	1099
				Supplier	Underfill	Carbon black	1333-86-4		0.008	mg	5000	78
				Supplier	Underfill	Silicon dioxide	60676-86-0		0.983	mg	655000	10283
				Supplier	Underfill	Additives	Proprietary		0.060	mg	40000	628
Glue Epoxy (EME-G760SW)	Molding Compound	29.184	mg	Supplier	Molding compound	2,2'-((3,3',5,5'-Tetramethyl-(1,1'-biphenyl)-4,4'-di	85954-11-6		2.043	mg	70000	21382
				Supplier	Molding compound	Phenol Resin A	9003-35-4		0.876	mg	30000	9164
				Supplier	Molding compound	Phenol Resin B	Proprietary		0.876	mg	30000	9164
				Supplier	Molding compound	Silica(Amorphous) A	60676-86-0		18.532	mg	635000	193963
				Supplier	Molding compound	Silica(Amorphous) B	7631-86-9		5.837	mg	200000	61091
				Supplier	Molding compound	Metal Hydroxide	Proprietary		0.876	mg	30000	9164
				Supplier	Molding compound	Carbon Black	1333-86-4		0.146	mg	5000	1527
Solder balls (SACN305)	Other inorganic materials	41.887	mg	Supplier	Solder Ball	Tin	7440-31-5		40.379	mg	964000	422632
				Supplier	Solder Ball	Silver	7440-22-4		1.257	mg	30000	13152
				Supplier	Solder Ball	Copper	7440-50-8		0.230	mg	5500	2411
				Supplier	Solder Ball	Nickel	7440-02-0		0.021	mg	500	219