



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*	2024-06-20
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
STM32N657X0H3Q	E0DJ*486ESXA	A	9991	2024-06-20
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	331	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	14x14	264	Bulk solder	
Comment	Package : B0GH FC VFBGA 14X14X1.0 264 P0.8 DM00762137			

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	EODJ*486ESXA		330.5999		5000000.0	1000000.0				
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	5.000	mg	supplier	die	Silicon(Si)	7440-21-3		4.664	mg	932860	14109				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.003	mg	500	8				
				supplier	metallisation	Arsenic(As)	7440-38-2		0.000	mg	4	0				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.249	mg	49763	753				
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.000	mg	29	0				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.001	mg	196	3				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.003	mg	500	8				
				supplier	metallisation	Tin(Sn)	7440-31-5		0.053	mg	10667	161				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	108	2				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.003	mg	550	8				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.007	mg	1399	21				
				supplier	passivation	Silicon Oxide	7631-86-9		0.017	mg	3424	52				
				supplier	Solder Mask	Plastics PAK	Proprietary		3.830	mg	45576	11586				
				Substrate (A31563)	Copper & Resin	84.044	mg	supplier	Solder Mask	Barium sulphate	7727-43-7		1.529	mg	18194	4625
supplier	Solder Mask	Plastic EP	Proprietary						0.983	mg	11696	2973				
supplier	Solder Mask	Silicon dioxide	7631-86-9						0.780	mg	9283	2360				
supplier	Solder Mask	Additives, not to declare	Proprietary						0.351	mg	4178	1062				
supplier	Solder Mask	Talc	14807-96-6						0.234	mg	2785	708				
supplier	Solder Mask	Pigment portion, not to declare	Proprietary						0.047	mg	556	141				
supplier	Solder Mask	Inorganic Ingredient, not to declare	Proprietary						0.047	mg	556	141				
supplier	PP	Thermosetting resin (including filler)	Proprietary						17.875	mg	212689	54069				
supplier	PP	Glass Cloth	65997-17-3						11.917	mg	141792	36046				
supplier	Cu foil	Copper	7440-50-8						3.940	mg	46881	11918				
supplier	Cu Plating	Copper	7440-50-8						42.510	mg	505814	128586				
Underfill (UA26)	Encapsulation Glue	1.500	mg					supplier	Underfill	p-(2,3-epoxypropoxy)-N, N-bis(2,3-epoxypropyl)am	5026-74-4		0.150	mg	100000	454
								supplier	Underfill	Bisphenol F type liquid epoxy resin	9003-36-5		0.150	mg	100000	454
								supplier	Underfill	Bisphenol A type liquid epoxy resin	25068-38-6		0.045	mg	30000	136
				supplier	Underfill	Amine type hardener	Proprietary		0.105	mg	70000	318				
				supplier	Underfill	Carbon black	1333-86-4		0.008	mg	5000	23				
				supplier	Underfill	Silicon dioxide	60676-86-0		0.983	mg	655000	2972				
				supplier	Underfill	Additives	Proprietary		0.060	mg	40000	181				
Encapsulation (EME-G760-SW)	Molding Compound	174.624	mg	supplier	Molding compound	2,2'-((3,3',5,5'-Tetramethyl-(1,1'-biphenyl)-4,4'-diylidene)bis(4-methylphenol))	85954-11-6		12.224	mg	70000	36974				
				supplier	Molding compound	Phenol Resin A	9003-35-4		5.239	mg	30000	15846				
				supplier	Molding compound	Phenol Resin B	Proprietary		5.239	mg	30000	15846				
				supplier	Molding compound	Silica(Amorphous) A	60676-86-0		110.886	mg	635000	335408				
				supplier	Molding compound	Silica(Amorphous) B	7631-86-9		34.925	mg	200000	105640				
				supplier	Molding compound	Metal Hydroxide	Proprietary		5.239	mg	30000	15846				
				supplier	Molding compound	Carbon Black	1333-86-4		0.873	mg	5000	2641				
Solder balls (SACN305)	Other inorganic materials	65.433	mg	supplier	Solder Ball	Tin	7440-31-5		63.077	mg	964000	190796				
				supplier	Solder Ball	Silver	7440-22-4		1.963	mg	30000	5938				
				supplier	Solder Ball	Copper	7440-50-8		0.360	mg	5500	1089				
				supplier	Solder Ball	Nickel	7440-02-0		0.033	mg	500	99				