



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*	2024-04-15
Authorized representative*	giovanni giacopello	Representative title	ADG
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 omprehensive 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				
Manufacturing item number	Manufacturing item name	Version	Manufacturing site	Date
STA1080HOA3	80XO*V860BGH	A	959	2024-04-15
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	695.0	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant			

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	
SACN306	Nickel/Gold (Ni/Au)	Copper Alloy	DM00793516	
Package designator	Package Size	Number of instances	Shape	
BGA	16.00x16.00x1.70	361	Bulk solder	
Comment	LFBGA16X16X1.7 361 F19X19 P.8B.4			

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 : ELV directive : 2000/53/EC amended 2020/363_ March 2020		Response
1 - Product(s) meets EU ELV requirement without any exemptions		true
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)		false
Exemption Id.	Description	

QueryList : California Prop65 list, dated 29th December 2023			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			true
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			false
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.582	die - substrate - solder balls	837
Lead	0.009	solder balls	13
Bisphenol A	0.159	substrate	229

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014					Response
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products					false
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products					false
Hazardous substance					
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE	
O	O	O	O	O	

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	
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH					false
CategoryLevel_Name	CategoryLevel_Threshold	Amount in homogeneous material (mg)	Application - homogeneous material	ppm in homogeneous material	
4,4'-isopropylidenediphenol	1000 ppm	0.159	Substrate	1499	



QueryList : Korea Chemical Control Act_27 Dec 2017 update	Response
The Product does contain at least one of the substances listed in Chemical Control Act	false



QueryList : Responsible metals sourcing	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
QueryList : China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	Response
The product contains adhesives identified under GB 33372	true
QueryList:Stockholm Convention Persistent Organic Pollutants	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true
QueryList:EUSRR Directive	Response
Product contains hazardous materials listed in EUSRR Annex II	True
PFAS/PTFE Declaration	Response
QUERY	Response
The product is containing at least one of the following PFAS substance: Polytetrafluoroethylene, Thiophenium, Triphenylsulfonium nonaflate, Trifluoroacetic anhydride	False
BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	False
Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True
Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True

Material composition declaration : note : Substance present with less 0.001mg will not be declared in this document						Manufacturing item name	80X0°V860BGH						
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	M-011 Other inorganic materials	12.148	mg	supplier	die	Silicon(Si)	7440-21-3		11.435	mg	941309	16451	
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.079	mg	6503	114	
				supplier	metallisation	Copper(Cu)	7440-50-8		0.234	mg	19262	337	
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.001	mg	82	1	
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.042	mg	3457	60	
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.010	mg	823	14	
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	82	1	
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.056	mg	4610	81	
				supplier	passivation	Silicon Oxide	7631-86-9		0.290	mg	23872	417	
				Substrate	M-015 Other organic materials	106.093	mg	supplier	core material	Fiber glass	65997-17-3		46.680
supplier	core material	Bisphenol F type epoxy resin	9003-36-5						26.046	mg	245502	37476	
supplier	core material	Bismaleimide (B)	105391-33-1						15.702	mg	148002	22593	
supplier	core material	Triazine (T)	25722-66-1						15.702	mg	148002	22593	
supplier	core material	Aluminium hydroxide	21645-51-2						1.061	mg	10001	1527	
supplier	core material	Zinc hydroxide	20427-58-1						0.212	mg	1998	305	
supplier	core material	Calcium sulfate	7778-18-9						0.531	mg	5005	764	
SVHC	core material	BPA	80-05-7						0.159	mg	1499	229	
supplier	Solder mask	Barium sulfate	7727-43-7						9.992	mg	331003	14377	
supplier	Solder mask	Bisphenol F type epoxy resin	9003-36-5						9.660	mg	320005	13899	
supplier	Solder mask	polymerized Biphenyl resin	85954-11-6			3.924	mg	129990	5646				
supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6			2.415	mg	80001	3475				
supplier	Solder mask	Methoxymethylethoxy propanol	34590-94-8			2.385	mg	79008	3432				
supplier	Solder mask	Amorphous silica	7631-86-9			1.811	mg	59993	2606				
M-004 Copper and its alloys	60.852	mg	supplier		metallisation	Copper(Cu)	7440-50-8		60.210	mg	989450	86633	
			M-006 Nickel and its alloys		California 65	metallisation	Nickel(Ni)	7440-02-0		0.545	mg	8956	784
			M-008 Precious metals		supplier	metallisation	Gold(Au)	7440-57-5		0.097	mg	1594	140
Die attach	M-015 Other organic materials	1.941	mg	supplier	glue	Silver(Ag)	7440-22-4		1.706	mg	878929	2455	
				supplier	glue	Neopentyl glycol dimethacrylate	1985-51-9		0.097	mg	49974	140	
				supplier	glue	Diglycidyl phenyl allyl ether	EC417-470-1		0.097	mg	49974	140	
				supplier	glue	Ditrimethylolpropane tetraacrylate	94108-97-1		0.039	mg	20093	56	
				supplier	glue	Hydroquinone	123-31-9		0.001	mg	515	1	
				supplier	glue	Fluorine trace	14762-94-8		0.001	mg	515	1	
				supplier	glue						0		
Bonding wire	M-008 Precious metals	2.697	mg	supplier	wire	Gold(Au)	7440-57-5		2.670	mg	989989	3842	
				supplier	wire	Palladium(Pd)	7440-05-3		0.027	mg	10011	39	
Encapsulation	M-015 Other organic materials	390.354	mg	supplier	mold compound	Silica vitreous	60676-86-0		353.270	mg	904999	508302	
				supplier	mold compound	Epoxyde bisphenol A resin	25068-38-6		9.759	mg	25000	14042	
				supplier	mold compound	Epoxy resin	25068-38-6		15.614	mg	40000	22466	
				supplier	mold compound	Phenol Resin	29690-82-2		9.759	mg	25000	14042	
				supplier	mold compound	Carbon black	1333-86-4		1.952	mg	5001	2809	
Solder balls	Solder	90.728	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		87.390	mg	963208	125741	
				supplier	solder alloy	Silver(Ag)	7440-22-4		2.722	mg	30002	3917	
				supplier	solder alloy	Copper(Cu)	7440-50-8		0.544	mg	5996	783	
				California 65	solder alloy	Nickel(Ni)	7440-02-0		0.036	mg	397	52	
				supplier	solder alloy	Antimony(Sb)	7440-36-0		0.027	mg	298	39	
SVHC	solder alloy	Lead(Pb)	7439-92-1		0.009	mg	99	13					