



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*	2024-08-14
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*	Floriana SAN BIAGIO	Representative title	APMS Material 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
	BNEG*F188AAV	A	P1C7-CA2A	2024-08-14
Amount	Unit of measure	Unit type	ST ECOPACK grade	
135	mg	Each	ECOPACK® 3	

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
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0

Comment	A0EG VFQFPN 7X7X1.0 56L PITCH 0.4; MDF is valid for ST85MMTR and ST85MM
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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 : California Prop65 list, dated 17th Nov 2023	Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen	false
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen	true

Substance	amount in product (mg)	Application	ppm in product
Nickel	1.086	alloy	8044
Lead	0.000		0
Lead-Borate Glass	0.000		0
Lead Zirconate Titanate	0.000		0
Antimony trioxide	0.000		0
Bisphenol A	0.000		0

QueryList : REACH-27th June 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 Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material
,			,	



QueryList : Responsible metals sourcing	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tantalum, Tungsten,

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 : 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
All the adhesive impacted complies with GB 33372	true

QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true

QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	False

PFAS/PTFE Declaration	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)	True

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						Mfr Item Name	BNEG*F18AAV		135.0000		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	M-011 Other inorganic materials	5.552	mg	supplier	die	Silicon(Si)	7440-21-3		5.292	mg	953170	39200
				supplier	metallisation	Aluminium(AI)	7429-90-5		0.031	mg	5584	230
				supplier	metallisation	Copper(Cu)	7440-50-8		0.096	mg	17291	711
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.016	mg	2882	119
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	540	22
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	180	7
				supplier	passivation	Silicon oxide	7631-86-9		0.113	mg	20353	837
				supplier	alloy	Copper(Cu)	7440-50-8		55.001	mg	956639	407415
Leadframe	M-004 Copper and its alloys	57.494	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.968	mg	16837	7170
				supplier	alloy	Iron phosphide	26508-33-8		0.225	mg	3913	1667
				supplier	alloy	Zinc(Zn)	7440-66-6		0.072	mg	1252	533
				supplier	metallization	Nickel (Ni)	7440-02-0		1.086	mg	18889	8044
				supplier	metallization	Palladium (Pd)	7440-05-3		0.122	mg	2122	904
				supplier	metallization	Gold (Au)	7440-57-5		0.020	mg	348	148
				supplier	glue	Silver(Ag)	7440-22-4		0.634	mg	799496	4696
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.063	mg	79445	467
Die attach	M-015 Other organic materials	0.793	mg	supplier	glue	Epoxy resin	68475-94-5		0.024	mg	30265	178
				supplier	glue	Diglycidyl phenyl allyl ether	EC417-470-1		0.024	mg	30265	178
				supplier	glue	Other	proprietary		0.024	mg	30265	178
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.024	mg	30265	178
				supplier	wire	Gold(Au)	7440-57-5		0.765	mg	989651	5667
				supplier	wire	Palladium(Pd)	7440-05-3		0.008	mg	10349	59
Encapsulation	M-015 Other organic materials	70.388	mg	supplier	mold compound	Silica vitreous	60676-86-0		61.941	mg	879994	458822
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.519	mg	49994	26067
				supplier	mold compound	Phenolic resin	205830-20-2		2.745	mg	38998	20333
				supplier	mold compound	Epoxy type resin	proprietary		1.408	mg	20003	10430
				supplier	mold compound	Carbon black	1333-86-4		0.141	mg	2003	1044
				supplier	mold compound	other	proprietary		0.634	mg	9007	4696