



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*	2024-09-19
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*	Antoonella Lanzafame	Representative title	AMSMaterial 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
STDRIVEG610QTR	NNZA*U1T9ABQ	A	Z7GA	2024-09-19
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	44.3	mg	Each	ECOPACK® 3
Identity	Authority			
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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

Package designator	Package size	Number of instances	Shape	
QFN	5 x 4	18	Flat	
Comment				
Comment	B0KS QFN 4X5X0.97			

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 requirements without any exemptions		true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)		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	0.028	alloy	632

QueryList :Customer		Response
QUERY		Response

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014					Response
QUERY					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	O

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
	#N/A			
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, 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	false

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	NNZA*U1T9ABQ		44.3005		5999992.0	1000012.0
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	4.969	mg	supplier	die	Silicon(Si)	7440-21-3		4.749	mg	955725	107201
				supplier	metallisation	Aluminium(AI)	7429-90-5		0.029	mg	5836	655
				supplier	metallisation	Gold(Au)	7440-57-5		0.007	mg	1409	158
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.028	mg	5635	632
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	402	45
				supplier	metallisation	Tungsten(W)	7440-33-7		0.039	mg	7849	880
				supplier	metallisation	Vanadium(V)	7440-62-2		0.002	mg	402	45
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.010	mg	2012	226
				supplier	passivation	Silicon oxide	7631-86-9		0.103	mg	20729	2325
Leadframe	M-004 Copper and its alloys	18.311	mg	supplier	alloy	Cu	7440-50-8		17.926	mg	978980	404650
				supplier	alloy	Cr	7440-47-3		0.046	mg	2512	1038
				supplier	alloy	Sn	7440-31-5		0.046	mg	2512	1038
				supplier	alloy	Zn	7440-66-6		0.040	mg	2184	903
				supplier	alloy	Ni	7440-02-0		0.232	mg	12670	5237
				supplier	alloy	Pd	7440-05-3		0.018	mg	983	406
Die attach	M-011 Other inorganic materials	1.741	mg	supplier	alloy	Au	7440-57-5		0.003	mg	164	68
				supplier	glue	Silver	7440-22-4		1.053	mg	605000	23773
				supplier	glue	Copper	7440-50-8		0.174	mg	100000	3929
Bonding wires	M-004 Copper and its alloys	0.309	mg	supplier	glue	Phenol, 4,4'-(1-methylethyldiene)bis-, polymer wi	25036-25-3		0.514	mg	295000	11592
				supplier	wire	Copper	7440-50-8		0.298	mg	965000	6722
				supplier	wire	Palladium	7440-05-3		0.008	mg	24990	174
Encapsulation	M-008 Precious metals	15.641	mg	supplier	wire	Gold	7440-57-5		0.003	mg	10000	70
				supplier	mold compound	Epoxy Resin	proprietary		0.807	mg	51598	18218
				supplier	mold compound	Phenol Resin	proprietary		0.436	mg	27863	9838
				supplier	mold compound	Silica (Amorphous)A	60676-86-0		13.543	mg	865844	305706
				supplier	mold compound	Silica (Amorphous)B	7631-86-9		0.807	mg	51598	18218
Resin	M-011 Other inorganic materials	3.330	mg	supplier	mold compound	Carbon Black	1333-86-4		0.048	mg	3096	1093
				supplier	Molding compound	Fused Silica	60676-86-0		2.461	mg	738874	55542
				supplier	Molding compound	Epoxy Resin	85954-11-6		0.512	mg	153603	11547
				supplier	Molding compound	Phenolic Resin	26834-02-6		0.341	mg	102402	7698
				supplier	Molding compound	Carbon Black	1333-86-4		0.017	mg	5120	385