



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*	2024-02-15
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*	giovanni giacopello	Representative title	ADGMaterial 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
ADP280120W3	P4A6*BMJOM12	A	3068	2024-02-15
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	730000.00	mg	Each	ECOPACK® 1
Identity	Authority			
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
Not Applicable	Not Applicable	Not Applicable		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00978525	
Package designator	Package size	Number of instances	Shape	
Mounted BOARD	70.00x9.00x150.50	39	Pin	
Comment	ACEPACK DRIVE			



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		false
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)		true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions		false
Exemption Id.	Description	
7c-1	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020		Response
1 - Product(s) meets EU ELV requirements without any exemptions		false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)		true
Exemption Id.	Description	
10(a)	10(a) - Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs, — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)	

QueryList : California Prop65 list, dated 25th Feb 2022			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	97.574	die - base plate - ntc - pin holder - pin	134
Lead	27.438	ntc - housing	38
Antimony trioxide	5756.592	housing - cover plastic	7886

QueryList : REACH-23th 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 Embedded article nor Homogeneous Material above the limits per the definition within REACH				false
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material
Lead monoxide (lead oxide)	1000 ppm	27.438	NTC	231178

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 in the component :		Cobalt, Gold, Tin,

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		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		false

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
The material present in the product is:		Lead

PFAS/PTFE Restriction		Response
Product contains Per- and Polyfluorinated Substance		False

BPA Restriction		Response
Product contains Bisphenol A (Isopropylidenediphenol)		False

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P4A6*BMJOM12						
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)	
	M-011 Other inorganic materials			supplier	die	Silicium carbide	409-21-2		355.382	mg	927111	486	
				supplier	metallisation	Aluminium(Al)	7429-90-5		6.477	mg	16897	9	
				supplier	metallisation	Silicon(Si)	7440-21-3		1.548	mg	4038	2	
				supplier	metallisation	Copper(Cu)	7440-50-8		0.882	mg	2301	1	
				supplier	metallisation	Nickel(Ni)	7440-02-0		5.554	mg	14489	8	
				supplier	metallisation	Silver(Ag)	7440-22-4		5.682	mg	14823	8	
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.678	mg	1769	1	
				supplier	metallisation	Vanadium(V)	7440-62-2		0.178	mg	464	0	
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		1.033	mg	2695	1	
				supplier	passivation	Silicon oxide	7631-86-9		1.687	mg	4401	2	
				supplier	polymer coating	polyimide	proprietary		4.221	mg	11012	6	
Leadframe	M-004 Copper and its alloys	509326.166	mg	supplier	alloy	Copper(Cu)	7440-50-8		508652.744	mg	998678	696785	
				supplier	alloy	Iron phosphide	26508-33-8		427.825	mg	840	586	
				supplier	alloy	Iron(Fe)	7439-89-6		234.285	mg	460	321	
				supplier	metallization	Nickel (Ni)	7440-02-0		11.085	mg	22	15	
				supplier	metallization	Phosphorus (P)	7723-14-0		0.227	mg	0	0	
AMB	M-010 Ceramics / glass	46190.000	mg	supplier	Ceramic	Silicon nitride	12033-89-5		9223.248	mg	199680	12635	
				supplier	metallization	Copper (Cu)	7440-50-8		36957.345	mg	800116	50627	
				supplier	metallization	Silver (Ag)	7440-22-4		9.407	mg	204	13	
Die attach	M-011 Other inorganic materials	226.035	mg	supplier	tape	Silver(Ag)	7440-22-4		221.514	mg	979999	303	
				supplier	tape	Resin	proprietary		3.391	mg	15002	5	
				supplier	tape	Amine	proprietary		1.130	mg	4999	2	
Pin	M-004 Copper and its alloys	1499.645	mg	supplier	Alloy	Copper	7440-50-8		1438.160	mg	959000	1970	
				supplier	Alloy	Nickel	7440-02-0		47.989	mg	32000	66	
				supplier	Alloy	Silicon	7440-21-3		10.872	mg	7250	15	
				supplier	Alloy	Magnesium(Mg)	7439-95-4		2.624	mg	1750	4	
Pin Holder	M-004 Copper and its alloys	14.309	mg	supplier	Alloy	Copper	7440-50-8		12.773	mg	892655	17	
				supplier	Alloy	Nickel	7440-02-0		1.405	mg	98190	2	
				supplier	Alloy	Phosphorus	7723-14-0		0.131	mg	9155	0	
Soft solder	Solder	1194.421	mg	supplier	solder	Tin(Sn)	7440-31-5		1040.361	mg	871017	1425	
				supplier	solder	Silver(Ag)	7440-22-4		37.790	mg	31639	52	
				supplier	solder	flux residue	proprietary		10.890	mg	9117	15	
				supplier	solder	Copper(Cu)	7440-50-8		105.380	mg	88227	144	
Soft solder 2	Solder	5532.728	mg	supplier	solder	Tin(Sn)	7440-31-5		5256.052	mg	949993	7200	
				supplier	solder	Antimony(Sb)	7440-36-0		276.676	mg	50007	379	
Bonding wires	M-003 Aluminium and its alloys	249.140	mg	supplier	wire	Aluminium (Al)	7429-90-5		249.140	mg	1000000	341	
Bonding wires 2	M-003 Aluminium and its alloys	1.341	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.341	mg	1000000	2	
Screw	M-009 Other non-ferrous metals and alloys	4270.001	mg	supplier	alloy	Iron(Fe)	7439-89-6		4200.354	mg	983689	5754	
				supplier	alloy	Carbon (C)	7440-44-0		8.967	mg	2100	12	
				supplier	alloy	Silicon(Si)	7440-21-3		3.416	mg	800	5	
				supplier	alloy	manganese(Mn)	7439-96-5		40.138	mg	9400	55	
				supplier	alloy	phosphorus(P)	7723-14-0		0.385	mg	90	1	
				supplier	alloy	Sulfur(S)	7704-34-9		0.043	mg	10	0	
				supplier	alloy	Chrome(Cr)	7440-47-3		6.405	mg	1500	9	
				supplier	alloy	Nickel(Ni)	7440-02-0		3.416	mg	800	5	
				supplier	alloy	Copper(Cu)	7440-50-8		0.854	mg	200	1	
				supplier	alloy	Molybdenum(Mo)	7439-98-7		0.427	mg	100	1	
				supplier	alloy	Titanium(Ti)	7440-32-6		1.281	mg	300	2	
				supplier	alloy	Bore(B)	7440-42-8		0.115	mg	27	0	
				supplier	alloy	Zinc(Zn)	7440-66-6		4.200	mg	984	6	
NTC	M-011 Other inorganic materials	118.688	mg	supplier	Ceramics	Trimanganese tetroxide	1317-35-7		0.180	mg	1517	0	
				supplier	Ceramics	Nickel-monoxide	1313-99-1		0.180	mg	1517	0	
				supplier	Ceramics	Tricobalt-tetraoxide	1308-06-1		0.180	mg	1517	0	
				supplier	SVHC	Ceramics	Lead-monoxide	1317-36-8	7c-l-Electrical and electronic coi	27.438	mg	231178	38
				supplier	Ceramics	Gold(Au)	7440-57-5		0.027	mg	227	0	
				supplier	Ceramics	Quartz (SiO2)	14808-60-7		16.275	mg	137124	22	
				supplier	Ceramics	Dipotassium-oxide	12136-45-7		2.325	mg	19589	3	
				supplier	Ceramics	Antimonytrioxide	1309-64-4		0.186	mg	1567	0	
				supplier	Ceramics	Iron(Fe)	7439-89-6		29.232	mg	246293	40	

				supplier	metallization	Nickel(Ni)	7440-02-0		27.945	mg	235449	38
				supplier	metallization	Copper(Cu)	7440-50-8		13.224	mg	111418	18
				supplier	metallization	Tin(Sn)	7440-31-5		1.496	mg	12604	2
Housing	M-014 Other plastics and rubber	92000.700	mg	supplier	Plastic	PBT	24968-12-5		28539.228	mg	310205	39095
				supplier	Plastic	Antimony Trioxide	1309-64-4		3643.252	mg	39601	4991
				supplier	Plastic	Borosilicate	65997-17-3		14999.956	mg	163042	20548
				KCCA	Plastic	Bromine (Br)	7726-95-6		2795.880	mg	30390	3830
				supplier	Metal	Chloride	7782-50-5		21.620	mg	235	30
				supplier	Metal	Copper	7440-50-8		41799.372	mg	454338	57259
				supplier	Metal	Iron(Fe)	7439-89-6		0.184	mg	2	0
				SVHC	Metal	Lead(Pb)	7439-92-1		0.184	mg	2	0
				supplier	Metal	Sulfur	7704-34-9		0.184	mg	2	0
				supplier	Metal	Tin	7440-31-5		200.800	mg	2183	275
Silicon Gel	M-011 Other inorganic materials	39993.504	mg	supplier	Silicone compound	Polydimethylsiloxane A	9006-65-9		19996.752	mg	500000	27393
				supplier	Silicone compound	Polydimethylsiloxane B	9006-65-9		19996.752	mg	500000	27393
Cover	M-014 Other plastics and rubber	29000.000	mg	supplier	Plastic	PBT	24968-12-5		16552.707	mg	570783	22675
				supplier	Plastic	Antimony Trioxide	1309-64-4		2113.114	mg	72866	2895
				supplier	Plastic	Borosilicate	65997-17-3		8700.000	mg	300000	11918
				KCCA	Plastic	Bromine (Br)	7726-95-6		1621.622	mg	55918	2221
				supplier	Plastic	Chloride	7782-50-5		12.557	mg	433	17