Materials Declaration Form

IPC **Form Type ***	**1752** Distribute	**Version**	**2**
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D **** : Required Field***

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2022-07-21
Company Unique ID	NL 008751171B01		
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**	ADG 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

Legal Statement

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.

Signature Not Verified

Digitally signed by giovanni giacopello
Date: 2022.07.21 09:30:05 +02:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
ADP61075W3-L	P8A6*BMHO222	A	3068	2022-07-21
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	730000	mg	Each	ECOPACK® 1
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

Manufacturing information				
J-STD-020 MSL Rating	**Classification Temp**	**Nbr of Reflow Cycles**		
Not Applicable	Not Applicable	,		
Bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00791107	

Package Designator	**Package Size**	**Nbr of instances**	**Shape**	
Mounted BOARD	70.00,9.00,150.50	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

Query	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-I	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

Query	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 17th Dec 2021

Query	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	104.373	die - base plate - ntc - pin holder - pin	143
Lead	25.725	ntc - housing	35
Antimony trioxide	5756.592	housing - cover plastic	7886

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

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	**true**
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

Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
X	O	O	O	O
NTC,Housing				
Homogeneous Material(s) containing Lead				

QueryList : REACH-17 Jan 2022

Query	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

Query	Response
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	27.44	NTC	231179

QueryList : Responsible metals sourcing

Query	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 :	**Cobalt, Gold, Tin,**
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update

Query	Response
The Product does contain at least one of the substances listed in Chemical Control Act	**true**

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020
application date 1st December 2020

Query	Response
The product contains adhesives identified under GB 33372	**false**

Stockholm Convention Persistent Organic Pollutants

Query	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	**true**

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**P8A6*BMHO222**					
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Dies	M-011 Other inorganic materials	574.987	mg	supplier	die	Silicium carbide	409-21-2		710.763	mg	927108	975
				supplier	metallisation	Aluminium(Al)	7429-90-5		12.953	mg	16896	18
				supplier	metallisation	Silicon(Si)	7440-21-3		2.322	mg	3029	3
				supplier	metallisation	Copper(Cu)	7440-50-8		1.764	mg	2301	2
				supplier	metallisation	Nickel(Ni)	7440-02-0		11.109	mg	14490	15
				supplier	metallisation	Silver(Ag)	7440-22-4		11.365	mg	14824	16
				supplier	metallisation	Titanium(Ti)	7440-32-6		1.357	mg	1770	2
				supplier	metallisation	Vanadium(V)	7440-62-2		0.355	mg	463	0
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		2.067	mg	2696	3
				supplier	passivation	Silicon oxide	7631-86-9		3.374	mg	4401	5
				supplier	polymer coating	polyimide	proprietary		8.443	mg	11013	12
Baseplate	M-004 Copper and its alloys	508899.710	mg	supplier	alloy	Copper(Cu)	7440-50-8		508652.744	mg	999515	696785
				supplier	alloy	Iron(Fe)	7439-89-6		234.285	mg	460	321
				supplier	metallization	Nickel (Ni)	7440-02-0		12.330	mg	24	17
				supplier	metallization	Phosphorus (P)	7723-14-0		0.351	mg	1	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	301.380	mg	supplier	tape	Silver(Ag)	7440-22-4		295.352	mg	979999	405
				supplier	tape	Resin	proprietary		4.521	mg	15001	6
				supplier	tape	Amine	proprietary		1.507	mg	5000	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	1089.041	mg	supplier	solder	Tin(Sn)	7440-31-5		1040.361	mg	955300	1425
				supplier	solder	Silver(Ag)	7440-22-4		37.790	mg	34700	52
				supplier	solder	flux residue	proprietary		10.890	mg	10000	15
Soft solder Copper mesh	M-004 Copper and its alloys	105.380	mg	supplier	solder	Copper(Cu)	7440-50-8		105.380	mg	1000000	144
Soft solder 2	Solder	5533.520	mg	supplier	solder	Tin(Sn)	7440-31-5		5256.844	mg	950000	7201
				supplier	solder	Antimony(Sb)	7440-36-0		276.676	mg	50000	379
Bonding wires	M-003 Aluminum and its alloys	253.162	mg	supplier	wire	Aluminium (Al)	7429-90-5		253.162	mg	1000000	347
Bonding wires 2	M-003 Aluminum and its alloys	247.799	mg	supplier	wire	Aluminium (Al)	7429-90-5		247.799	mg	1000000	339
Screw	M-009 Other non-ferrous metals and alloys	4270.000	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		0.384	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 tetraoxide	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
				SVHC	Ceramics	Lead-monoxide	1317-36-8	7c-I-Electrical and electronic co	27.438	mg	231177	38
				supplier	Ceramics	Gold(Au)	7440-57-5		0.027	mg	227	0
				supplier	Ceramics	Quartz (SiO2)	14808-60-7		16.275	mg	137125	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	246294	40
				supplier	metallization	Nickel(Ni)	7440-02-0		27.944	mg	235444	38

				supplier	metallization	Copper(Cu)	7440-50-8		13.224	mg	111419	18
				supplier	metallization	Tin(Sn)	7440-31-5		1.496	mg	12607	2
Housing	M-014 Other plastics and rubber	95096.071	mg	supplier	Plastic	PBT	24968-12-5		28539.228	mg	300110	39095
				supplier	Plastic	Antimony Trioxide	1309-64-4		3643.292	mg	38312	4991
				supplier	Plastic	Borosilicate	65997-17-3		14999.956	mg	157735	20548
				KCCA	Plastic	Bromine (Br)	7726-95-6		2795.880	mg	29401	3830
				supplier	Metal	Chloride	7782-50-5		21.620	mg	227	30
				supplier	Metal	Copper	7440-50-8		44895.322	mg	472105	61500
				supplier	Metal	Iron(Fe)	7439-89-6		0.254	mg	3	0
				SVHC	Metal	Lead(Pb)	7439-92-1		0.254	mg	3	0
				supplier	Metal	Sulfur	7704-34-9		0.254	mg	3	0
				supplier	Metal	Tin	7440-31-5		200.011	mg	2103	274
Silicon Gel	M-011 Other inorganic materials	36614.650	mg	supplier	Silicone compound	Polydimethylsiloxane A	9006-65-9		18307.325	mg	500000	25079
				supplier	Silicone compound	Polydimethylsiloxane B	9006-65-9		18307.325	mg	500000	25079
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