STRIVE FOR EXCELLENCE

Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information	*: Required Field	

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2023-01-24
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.

Signature Not
Verified

Digitally signed by
giovanni giacopello
Date: 2023.01.24
09:49:26 +01:00

Product

Mfr item number	Mfr item name	Version	Manufacturing site	date
STGSH80HB65DAG	1H6R*EWFRA82	A	3068	2023-01-24
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	8200.00	mg	Each	ECOPACK® 2
Identity	**Authority**			
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information

J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
3	245	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00929851	
Package designator	Package size	Number of instances	Shape	
DSO	25.00x23.00x5.50	9	Gull wing	
Comment	ACEPACK SMIT			

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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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
8(e)	8(e) - Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

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	0.453	die - leadframe	55
Lead	8.869	soft solder	1082

QueryList : REACH-10 Jun 2022				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	8.87	Soft solder	1082
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	1000 ppm	8.87	Soft solder	859899

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, Tin, 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

Stockholm Convention Persistent Organic Pollutants	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**	**1H6R*EWFRA82**					
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)**
Dies	M-011 Other inorganic materials	22.911	mg	supplier	die	Silicon(Si)	7440-21-3		20.631	mg	900484	2518
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.921	mg	40199	112
				supplier	metallisation	Gold(Au)	7440-57-5		0.024	mg	1048	3
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.453	mg	19772	55
				supplier	metallisation	Silver(Ag)	7440-22-4		0.279	mg	12178	34
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.041	mg	1790	5
				supplier	metallisation	Tungsten(W)	7440-33-7		0.237	mg	10344	29
				supplier	metallisation	Vanadium(V)	7440-62-2		0.012	mg	524	1
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.011	mg	480	1
				supplier	passivation	Silicon oxide	7631-86-9		0.302	mg	13181	37
Leadframe	M-004 Copper and its alloys	581.242	mg	supplier	alloy	Copper(Cu)	7440-50-8		580.487	mg	998701	70791
				supplier	alloy	Iron(Fe)	7439-89-6		0.482	mg	829	59
				supplier	alloy	Iron phosphide	26508-33-8		0.273	mg	470	33
Soft solder	Solder	10.314	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	8.869	mg	859898	1082
				supplier	solder	Tin(Sn)	7440-31-5		0.413	mg	40043	50
				supplier	solder	Rosin, hydrogenated	65997-06-0		0.413	mg	40043	50
				supplier	solder	Silver(Ag)	7440-22-4		0.258	mg	25015	31
				supplier	solder	Terpineol	8000-41-7		0.258	mg	25015	31
				supplier	solder	Reaction mass of :12-hydroxy-N-[2-[(1-oxodecyl)-	126098-16-6		0.103	mg	9986	13
Bonding wires	M-003 Aluminum and its alloys	8.164	mg	supplier	wire	Aluminium (Al)	7429-90-5		8.164	mg	1000000	996
Bonding wires 2	M-003 Aluminum and its alloys	0.301	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.299	mg	995000	37
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	5000	0
Encapsulation	M-011 Other inorganic materials	7568.138	mg	supplier	mold compound	Silica, vitreous	60676-86-0		6811.324	mg	900000	830649
				supplier	mold compound	Mixture of 1,1'-[1-[4-[1-[4-(2,3-epoxypropoxy)pher	115254-47-2		302.726	mg	40000	36918
				supplier	mold compound	4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethyl(1	85954-11-6		302.726	mg	40000	36918
				supplier	mold compound	Phenol polymer with formaldehyde	9003-35-4		75.681	mg	10000	9229
				supplier	mold compound	Carbon black	1333-86-4		75.681	mg	10000	9229
Connections coating	Solder	8.930	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		8.930	mg	1000000	1089