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*	2024-05-03
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*	gregorio duro	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
Gregorio Duro
Date: 2024.05.03
09:00:12 CEST

Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
SCT019H120G3AG	T38P*BRIGAV2	A	3068	2024-05-03
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1540.00	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 temperature	Number of reflow cycles		
1	245	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01033309	
Package designator	Package size	Number of instances	Shape	
Not Applicable	10.20x9.15x4.50	7	0	
Comment	H2PAK-7			

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 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	1.344	die - leadframe	873
Lead	5.790	soft solder	3760

QueryList : REACH-23rd January 2024				**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	5.790	Soft solder	3760
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	5.790	Soft solder	954973

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 :	**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 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**	**T38P*BRIGAV2**					
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	10.463	mg	California 65	die	Silicium carbide	409-21-2		9.808	mg	937398	6366
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.179	mg	17108	116
				supplier	metallisation	Silicon(Si)	7440-21-3		0.043	mg	4110	28
				supplier	metallisation	Copper(Cu)	7440-50-8		0.024	mg	2294	16
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.153	mg	14623	99
				supplier	metallisation	Silver(Ag)	7440-22-4		0.157	mg	15005	102
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.018	mg	1720	12
				supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	478	3
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.029	mg	2772	19
				supplier	passivation	Silicon oxide	7631-86-9		0.047	mg	4492	31
Leadframe	M-004 Copper and its alloys	1031.008	mg	supplier	alloy	Copper(Cu)	7440-50-8		1028.454	mg	997523	667827
				supplier	alloy	Iron phosphide	26508-33-8		0.865	mg	839	562
				supplier	alloy	Iron(Fe)	7439-89-6		0.474	mg	460	308
				supplier	metallization	Nickel (Ni)	7440-02-0		1.191	mg	1155	773
				supplier	metallization	Phosphorus (P)	7723-14-0		0.024	mg	23	16
Soft solder	Solder	6.063	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	5.790	mg	954973	3760
				supplier	solder	Silver(Ag)	7440-22-4		0.152	mg	25070	99
				supplier	solder	Tin(Sn)	7440-31-5		0.121	mg	19957	79
Bonding wires	M-003 Aluminum and its alloys	3.448	mg	supplier	wire	Aluminium (Al)	7429-90-5		3.448	mg	1000000	2239
Bonding wires 2	M-003 Aluminum and its alloys	0.171	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.170	mg	994152	110
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	5848	1
Encapsulation	M-011 Other inorganic materials	486.571	mg	supplier	mold compound	Silica vitreous	60676-86-0		400.448	mg	823001	260031
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		34.060	mg	70000	22117
				supplier	mold compound	Phenol resin	9003-35-4		19.463	mg	40000	12638
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		14.597	mg	30000	9479
				supplier	mold compound	Antimony trioxide	1309-64-4		5.839	mg	12000	3792
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		9.731	mg	19999	6319
				supplier	mold compound	Carbon black	1333-86-4		2.433	mg	5000	1580
Connections coating	Solder	2.276	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.276	mg	1000000	1478