



## 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*	2024-11-04
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*	Antonella Lanzafame	Representative title	Material Declaration champion
Representative phone*	Refer to Supplier Comment section	Representative email*	Refer to Supplier Comment section
Supplier comment	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
SM50T19AY	AHZK*UAY019H	A	ZA41	2024-11-04
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	250	mg	Each	ECOPACK® 2
Identity	Authority			

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
1	260	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	0

Package designator	Package size	Number of instances	Shape	
soj	6.88x5.97	2	J bend	
Comment				
Comment	ZK SMC CLIP (SOD 15 NEW)			

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		true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)		false
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	0.106	alloy	424	
Lead	3.885	alloy	15540	

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					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
Hazardous substance					
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE	
X	O	O	O	O	
Soft solder					
Homogeneous Material(s) containing Lead					

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					false
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	



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,

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	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	AHZK*UAY019H		250.0000		5000000.0	999999.0
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	13.519	mg	supplier	die	Silicon(Si)	7440-21-3		13.001	mg	961684	52004
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.146	mg	10800	584
				supplier	metallisation	Gold(Au)	7440-57-5		0.070	mg	5178	280
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.106	mg	7841	424
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.016	mg	1184	64
				supplier	passivation	Silicon oxide	7631-86-9		0.072	mg	5326	288
				supplier	polymer coating	polyimide	proprietary		0.108	mg	7989	432
Leadframe	M-004 Copper and its alloys	88.301	mg	supplier	alloy	Cu	7440-50-8		88.256	mg	999490	353024
				supplier	alloy	Zn	7440-66-6		0.004	mg	45	16
				supplier	alloy	Fe	7439-89-6		0.009	mg	102	36
				supplier	alloy	P	7723-14-0		0.032	mg	362	128
				supplier	solder	Pb	7439-92-1	7a-Lead in high melting temperat	3.885	mg	925000	15540
Soft solder	Solder	4.200	mg	supplier	solder	Sn	7440-31-5		0.210	mg	50000	840
				supplier	solder	Ag	7440-22-4		0.105	mg	25000	420
				supplier	moltd compound	Silicon dioxide	60676-86-0		129.708	mg	914206	518830
Encapsulation	M-011 Other inorganic materials	141.880	mg	supplier	moltd compound	Formaldehyde, oligomeric reaction products with	9003-35-4		10.371	mg	73098	41485
				supplier	moltd compound	Formaldehyde, polymer with (chloromethyl)oxiran	29690-82-2		0.710	mg	5001	2838
				supplier	moltd compound	carbon black	1333-86-4		0.546	mg	3847	2183
				supplier	moltd compound	3-Trimethoxysilylpropane-1-thiol	4420-74-0		0.546	mg	3847	2183
Connections coating	Solder	2.100	mg	supplier	solder alloy	Sn	7440-31-5		2.100	mg	1000000	8400