



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*	2023-12-15
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*	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.			



Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
SCT014TO65G3	SS9X*BRFGBVF	A	998G	2023-12-15
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	697.00	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		
1	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00956841	
Package designator	Package size	Number of instances	Shape	
CHP	9.90x10.38x2.30	8	No lead	
Comment	TO-LL			



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	0.153	die	220
Lead	5.764	soft solder	8270

QueryList : REACH-14th June 2023				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	5.764	Soft solder	8270
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	5.764	Soft solder	954937

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		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

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	SS9X'BRFGBVF									
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	10.580	mg	supplier	die	Silicium carbide	409-21-2		9.808	mg	927033	14070				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.179	mg	16919	257				
				supplier	metallisation	Silicon(Si)	7440-21-3		0.043	mg	4064	62				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.024	mg	2268	34				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.153	mg	14461	220				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.157	mg	14839	225				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.018	mg	1701	26				
				supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	473	7				
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.029	mg	2741	42				
				supplier	passivation	Silicon oxide	7631-86-9		0.047	mg	4442	67				
				supplier	polymer coating	polyimide	proprietary		0.117	mg	11059	168				
				Leadframe	M-004 Copper and its alloys	312.569	mg	supplier	alloy	Copper(Cu)	7440-50-8		312.162	mg	998698	447865
								supplier	alloy	Iron phosphide	26508-33-8		0.263	mg	841	377
supplier	alloy	Iron(Fe)	7439-89-6						0.144	mg	461	207				
Soft solder	Solder	6.036	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	5.764	mg	954937	8270				
				supplier	solder	Tin(Sn)	7440-31-5		0.121	mg	20046	174				
				supplier	solder	Silver(Ag)	7440-22-4		0.151	mg	25017	217				
Bonding wires	M-003 Aluminum and its alloys	7.388	mg	supplier	wire	Aluminium (Al)	7429-90-5		7.388	mg	1000000	10600				
Bonding wires 2	M-003 Aluminum and its alloys	0.274	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.274	mg	1000000	393				
Encapsulation	M-011 Other inorganic materials	357.877	mg	supplier	mold compound	Silica vitreous	60676-86-0		290.059	mg	810499	416154				
				supplier	mold compound	Silicon oxide	7631-86-9		26.841	mg	75001	38509				
				supplier	mold compound	Epoxy type resin	proprietary		26.841	mg	75001	38509				
				supplier	mold compound	Phenol type resin	proprietary		10.736	mg	29999	15403				
				supplier	mold compound	Carbon black	1333-86-4		1.968	mg	5499	2824				
				supplier	mold compound	Bismuth compound	7440-69-9		1.432	mg	4001	2055				
Connections coating	Solder	2.276	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.276	mg	1000000	3265				