



## 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*	2024-12-10
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*	Floriana SAN BIAGIO	Representative title	APMS 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
	V39X*BRF9BVF	A	998G	2024-12-10
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	697	mg	Each	ECOPACK® 2
<b>Identity</b>	<b>Authority</b>			
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	DM01124549

Package designator	Package size	Number of instances	Shape
CHP	9.9x10.38	8	no lead
Comment			
Comment	TO-LL; MDF is valid for SCT027TO65G3		

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
<b>Exemption Id.</b>	<b>Description</b>
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
<b>QUERY</b>	<b>Response</b>
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
<b>Exemption Id.</b>	<b>Description</b>
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		
<b>QUERY</b>	<b>Response</b>		
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		
<b>Substance</b>	<b>amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>
Nickel	0.050	alloy	72

QueryList :Customer	Response
<b>QUERY</b>	<b>Response</b>

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014	Response			
<b>QUERY</b>	<b>Response</b>			
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			
<b>Hazardous substance</b>				
<b>Lead (Pb)</b>	<b>Cadmium (Cd)</b>	<b>Mercury (Hg)</b>	<b>Hexavalent Chromium (Cr VI)</b>	<b>PBB &amp; PBDE</b>
X	O	O	O	O

QueryList : REACH-7th November 2024	Response			
<b>QUERY</b>	<b>Response</b>			
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	false			
<b>CategoryLevel_Name</b>	<b>CategoryLevel_Threshold</b>	<b>amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>
Lead (Pb)	1000ppm	3.32	Soft solder	4762
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
<b>CategoryLevel_Name</b>	<b>CategoryLevel_Threshold</b>	<b>Amount in embedded article / Homogeneous material (mg)</b>	<b>Application - article / Homogeneous material</b>	<b>ppm in article /Homogeneous material</b>
Lead (Pb)	1000ppm	3.32	Soft solder	954833



QueryList : Responsible metals sourcing	Response
<b>QUERY</b>	<b>Response</b>
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 :	<b>Tin,</b>
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	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	V39X*BRF9BVF		697.0000		7000002.0	999997.0
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	5.861	mg	supplier	die	Silicon(Si)	7440-21-3		0.024	mg	4095	34
	M-011 Other inorganic materials			California 65	die	Silicium carbide	409-21-2		5.547	mg	946426	7958
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.101	mg	17233	145
				supplier	metallisation	Copper(Cu)	7440-50-8		0.014	mg	2389	20
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.050	mg	8531	72
				supplier	metallisation	Silver(Ag)	7440-22-4		0.074	mg	12626	106
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.008	mg	1365	11
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.016	mg	2730	23
				supplier	passivation	Silicon oxide	7631-86-9		0.027	mg	4607	39
	Leadframe			M-004 Copper and its alloys	312.569	mg	supplier	alloy	Copper(Cu)	7440-50-8		312.162
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	3.476	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	3.319	mg	954833	4762
				supplier	solder	Tin(Sn)	7440-31-5		0.070	mg	20138	100
				supplier	solder	Silver(Ag)	7440-22-4		0.087	mg	25029	125
Bonding wires	M-003 Aluminum and its alloys	1.970	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.970	mg	1000000	2826
Bonding wires 2	M-003 Aluminum and its alloys	0.239	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.239	mg	1000000	343
Encapsulation	M-011 Other inorganic materials	370.609	mg	supplier	mold compound	Silica vitreous	60676-86-0		300.379	mg	810501	430960
				supplier	mold compound	Silicon oxide	7631-86-9		27.796	mg	75001	39879
				supplier	mold compound	Epoxy type resin	proprietary		27.796	mg	75001	39879
				supplier	mold compound	Phenol type resin	proprietary		11.118	mg	29999	15951
				supplier	mold compound	Carbon black	1333-86-4		2.038	mg	5499	2924
				supplier	mold compound	Bismuth compound	7440-69-9		1.482	mg	3999	2126
Connections coating	Solder	2.276	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		2.276	mg	1000000	3265