



## 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*	2024-02-14
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*	Antomnella Lanzafame	Representative title	AMSMaterial 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
TSC199A2IQT	CNO4*US5MAAA	A	Z7GA	2024-02-14
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	3.50	mg	Each	ECOPACK® 3
Identity	Authority			
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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), immersion	Copper Alloy		0

Package designator	Package size	Number of instances	Shape	
QFN	1.8 x 1.4	10	Flat	
Comment				
Comment	B0FV POA FOR VFQFPN 1.8X1.4X0.75 10L			

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	true
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

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

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

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	false			
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
O	O	O	O	O

QueryList : REACH-23rd January 2024	Response			
QUERY	Response			
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	true			
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
	#N/A			
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	true			
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 :	<b>Tin,</b>

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	False

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 :						Mfr Item Name	CNO4*US5MAAA		4.0379		4485987.0	1153689.0
note : Substance present with less 0.001mg will not be declared in this document												
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	1.080	mg	supplier	die	Silicon(Si)	7440-21-3		0.513	mg	475026	146571
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.007	mg	6482	2000
				supplier	metallisation	Copper(Cu)	7440-50-8		0.485	mg	449098	138571
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.032	mg	29631	9143
				supplier	metallisation	Tin(Sn)	7440-31-5		0.023	mg	21297	6571
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	926	286
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	1852	571
				supplier	passivation	Silicon oxide	7631-86-9		0.017	mg	15742	4857
				supplier	UBM (Metal Sputter)	Copper Cu	7440-50-8		0.0021	mg	1984	612
				supplier	UBM Nickel	Nickel Ni	7440-02-0		0.0319	mg	29565	9122
				supplier	UBM Copper	Copper Cu	7440-50-8		0.4822	mg	446466	137759
				supplier	Solder bump	Tin	7440-31-5		0.0228	mg	21068	6501
				Leadframe	M-004 Copper and its alloys	0.209	mg	supplier	alloy	Copper	7440-50-8	
supplier	alloy	Iron	7439-89-6						0.005	mg	23963	1429
supplier	alloy	Iron	7439-89-6						0.005	mg	23963	1429
Encapsulation	M-011 Other inorganic materials	2.080	mg	supplier	mold compound	Epoxy Resin	proprietary		0.166	mg	79633	47316
				supplier	mold compound	Phenol Resin	proprietary		0.055	mg	26544	15772
				supplier	mold compound	Silica (Amorphous) A	60676-86-0		1.691	mg	813128	483143
				supplier	mold compound	Silica (Amorphous) B	7631-86-9		0.166	mg	79633	47316
				supplier	mold compound	Carbon Black	1333-86-4		0.002	mg	1062	631