



## 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*	2025-04-16
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	APMSMaterial 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
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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
L99BM2T-TR	AA5V*UR1TBBD	A	ZR1A	2025-04-16
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	180	mg	Each	ECOPACK® 3
<b>Identity</b>	<b>Authority</b>			
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	
3	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
QFP	7x7	32	gull wing
Comment			
Comment	5V LQFP 32 7x7x1.4 1		

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
<b>Exemption Id.</b>	<b>Description</b>	

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
<b>Exemption Id.</b>	<b>Description</b>	

QueryList : California Prop65 list, dated 3rd January 2025			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
<b>Substance</b>	<b>amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>
Nickel	1.910	alloy	10611

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
<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>	
O	O	O	O	O	

QueryList : REACH-21st January 2025				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
,				
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>Gold, Tantalum, Tin, Tungsten,</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

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	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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AA5V*UR1TBBD		180.0010		6000016.0	1000004.0
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	3.979	mg	supplier	die	Silicon(Si)	7440-21-3		3.731	mg	937673	20728
				supplier	metallisation	Copper(Cu)	7440-50-8		0.080	mg	20106	444
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.057	mg	14325	317
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.009	mg	2262	50
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.004	mg	1005	22
				supplier	metallisation	Tungsten(W)	7440-33-7		0.007	mg	1759	39
				supplier	Passivation	Silicon nitride(Si3N4)	12033-89-5		0.013	mg	3267	72
				supplier	passivation	Silicon oxide(SiO2)	7631-86-9		0.051	mg	12817	283
				supplier	polymer coating	polyimide	proprietary		0.027	mg	6786	150
Leadframe	M-004 Copper and its alloys	60.000	mg	supplier	alloy	Copper (Cu)	7440-50-8		55.179	mg	919650	306550
				supplier	alloy	Silver (Ag)	7440-22-4		2.100	mg	35000	11667
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.174	mg	2900	967
				supplier	alloy	Silicon (Si)	7440-21-3		0.695	mg	11583	3861
				supplier	alloy	Nickel (Ni)	7440-02-0		1.853	mg	30883	10294
Die attach	M-011 Other inorganic materials	0.740	mg	supplier	glue	Silver Powder	7440-22-4		0.622	mg	840000	3453
				supplier	glue	2-Phenoxyethyl	48145-04-6		0.074	mg	100000	411
				supplier	glue	Substitutedalko	2530-83-8		0.015	mg	20000	82
				supplier	glue	Polybutadiene	Trade Secret		0.015	mg	20000	82
				supplier	glue	Bisphenol F dia	Trade Secret		0.015	mg	20000	82
Bonding wires	M-004 Copper and its alloys	0.400	mg	supplier	wire	Copper (Cu)	7440-50-8		0.386	mg	965500	2146
				supplier	wire	Palladium (Pd)	7440-05-3		0.012	mg	31000	69
				supplier	wire	Gold (Au)	7440-57-5		0.001	mg	3500	8
Encapsulation	M-011 Other inorganic materials	114.581	mg	supplier	mold compound	Epoxy resin	Trade secret		6.662	mg	58141	37010
				supplier	mold compound	Phenol Resin	Trade secret		3.331	mg	29070	18505
				supplier	mold compound	Silica(Amorphous)	60676-86-0		92.375	mg	806198	513194
				supplier	mold compound	Silica(Amorphous)	7631-86-9		11.103	mg	96901	61683
				supplier	mold compound	Carbon black	1333-86-4		1.110	mg	9690	6168
Connections coating	Solder	0.300	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		0.300	mg	1000000	1667