



## 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*	2024-09-18
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*	giovanni giacopello	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*	Legal declaration*	Standard
true		

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
L99VR033PTR	AAWL*URL3AM3	A	3068	2024-09-18
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	84.00	mg	Each	ECOPACK® 2
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		
3	260	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM01021352	
Package designator	Package size	Number of instances	Shape	
QFP	4.90x3.90x1.55	12	Gull wing	
Comment	PowerSSO 12 monoframe. MDF valid for CPs: L99VR033P,L99VR033PTR			

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)		<b>True</b>
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)		<b>True</b>
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 29th December 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			<b>True</b>
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.012	die	143
Lead	0.542	soft solder	6452

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
Lead	1000 ppm	0.542	Soft solder	6452
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	0.542	Soft solder	955908



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, 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

Stockholm Convention Persistent Organic Pollutants	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	True

QueryList : EUSR Directive	Response
Product contains hazardous materials listed in EUSR Annex II	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	AAWL*URL3AM3					
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	0.972	mg	supplier	die	Silicon(Si)	7440-21-3		0.848	mg	872428	10092
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.001	mg	1029	12
				supplier	metallisation	Copper(Cu)	7440-50-8		0.077	mg	79218	917
				supplier	metallisation	Gold(Au)	7440-57-5		0.002	mg	2058	24
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.012	mg	12346	143
				supplier	metallisation	Palladium(Pd)	7440-05-3		0.003	mg	3086	36
				supplier	metallisation	Tungsten(W)	7440-33-7		0.004	mg	4115	48
				supplier	passivation	Silicon oxide	7631-86-9		0.012	mg	12346	143
				supplier	polymer coating	polyimide	proprietary		0.013	mg	13374	155
				supplier	alloy	Copper(Cu)	7440-50-8		29.188	mg	939973	347476
Leadframe	M-004 Copper and its alloys	31.052	mg	supplier	alloy	Iron(Fe)	7439-89-6		0.687	mg	22124	8179
				supplier	alloy	Iron phosphide	1310-43-6		0.041	mg	1320	488
				supplier	alloy	Zinc(Zn)	7440-66-6		0.036	mg	1159	429
				supplier	metallization	Silver (Ag)	7440-22-4		1.100	mg	35424	13095
				SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	0.542	mg	955909	6452
Soft solder	Solder	0.567	mg	supplier	solder	Silver(Ag)	7440-22-4		0.014	mg	24691	167
				supplier	solder	Tin(Sn)	7440-31-5		0.011	mg	19400	131
				supplier	wire	Copper(Cu)	7440-50-8		0.059	mg	1000000	702
Bonding wires	M-004 Copper and its alloys	0.059	mg	supplier	wire	Copper(Cu)	7440-50-8		0.059	mg	1000000	702
				supplier	mold compound	Silica vitreous	60676-86-0		25.131	mg	814487	299179
				supplier	mold compound	Silicon oxide	7631-86-9		2.314	mg	74996	27548
				supplier	mold compound	Epoxy type resin	proprietary		2.314	mg	74996	27548
				supplier	mold compound	Phenol type resin	proprietary		0.926	mg	30011	11024
Encapsulation	M-011 Other inorganic materials	30.855	mg	supplier	mold compound	Carbon black	1333-86-4		0.170	mg	5510	2024
				supplier	solder alloy	Tin (Sn)	7440-31-5		20.495	mg	1000000	243988
Connections coating	Solder	20.495	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		20.495	mg	1000000	243988