



## 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*	2025-08-19
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				
Manufacturing item number	Manufacturing item name	Version	Manufacturing site	Date
	77AA*MY3ZABE	B	CA2A	2025-08-19
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	13.2	mg	Each	ECOPACK® 2
<b>Comment</b>	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant			
<b>Identity</b>				

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	Nickel/Gold (Ni/Au), electrolytic	Copper Alloy		0
Package designator	Package Size	Number of instances		Shape
LGA	2.5 x 3	14		Flat
Reflow Additional Info	Preheat Min Temp	Preheat Max Temp	Preheat Duration	Ramp Rate
<b>Comment</b>	VFLGA 2.5MM X 3MM X 0.83 TYP 14L; MDF is valid for LSM6DSV256XTR-LSM6DSV320XTR-ISM6HG256XTR			

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>	
7c-I	7c-I-Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound	

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020		Response
1 - Product(s) meets EU ELV requirement without any exemptions		false
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)		true
<b>Exemption Id.</b>	<b>Description</b>	
10(a)	10(a) - Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound.	

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	
<b>Substance</b>	<b>amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>
Nickel	0.105	Die	7955
Lead	0.197	lead in glass	14939
Lead-Borate Glass	0.327	passivation	24773

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014		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>
X	O	O	O	O
Dies				
is Homogeneous Material containing Lead				

QueryList : REACH-23th January 2024		Response		
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH		true		
<b>CategoryLevel_Name</b>	<b>CategoryLevel_Threshold</b>	<b>Amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH				true



CategoryLevel_Name	CategoryLevel_Threshold	Amount in homogeneous material (mg)	Application - homogeneous material	ppm in homogeneous material
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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 : 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 :	Cobalt, Gold, Tantalum, Tin, Tungsten,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	
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	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
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						Manufacturing item name	77AA*MY3ZABE		13.2000		6000002.0	1000001.0				
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)				
Dies	M-011 Other inorganic materials	7.059	mg	supplier	die	Silicon(Si)	7440-21-3		6.534	mg	925627	495000				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.013	mg	1842	985				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.046	mg	6517	3485				
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.014	mg	1983	1061				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.009	mg	1275	682				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.005	mg	708	379				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	142	76				
				supplier	metallisation	Zirconium(Zr)	7440-67-7		0.002	mg	283	152				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.014	mg	1983	1061				
				supplier	passivation	Silicon Oxide	7631-86-9		0.093	mg	13175	7045				
				supplier	glass	Aluminium Oxide	1344-28-1		0.001	mg	142	76				
					JIG-R & California 65	glass	Lead-Borate Glass	65997-18-4	7c-l-Electrical and electroni	0.327	mg	46324	24773			
				Substrate	M-015 Other organic materials	2.805	mg	supplier	laminate	Fiber glass	65997-17-3		0.380	mg	135472	28788
								supplier	laminate	Bisphenol F type epoxy resin	9003-36-5		0.210	mg	74866	15909
								supplier	laminate	Bismaleimide (B)	105391-33-1		0.126	mg	44920	9545
supplier	laminate	Triazine (T)	25722-66-1						0.126	mg	44920	9545				
supplier	laminate	Aluminium hydroxide	21645-51-2						0.009	mg	3209	682				
supplier	laminate	Zinc hydroxide	20427-58-1						0.002	mg	713	152				
supplier	laminate	Calcium sulfate	7778-18-9						0.004	mg	1426	303				
supplier	laminate	Acrylic resin	9003-01-4						0.354	mg	126203	26818				
supplier	laminate	Barium sulfate	7727-43-7						0.049	mg	17469	3712				
supplier	laminate	Silica vitreous	7631-86-9						0.049	mg	17469	3712				
supplier	laminate	Talc	14807-96-6						0.025	mg	8913	1894				
		supplier	laminate					Additive	proprietary		0.015	mg	5348	1136		
	M-004 Copper and its alloys	supplier	laminate					Copper(Cu)	7440-50-8		1.332	mg	474866	100909		
	M-006 Nickel and its alloys	California 65	laminate					Nickel(Ni)	7440-02-0		0.105	mg	37433	7955		
		supplier	laminate					Gold(Au)	7440-57-5		0.019	mg	6774	1439		
Die attach-1	M-015 Other organic materials	0.168	mg	supplier	tape	Tin(Sn)	proprietary		0.106	mg	630952	8030				
				supplier	tape	Polypropylene	9003-07-0		0.003	mg	17857	227				
				supplier	tape	epoxy resin	29690-82-2		0.017	mg	101190	1288				
				supplier	tape	Propenoste polymer	proprietary		0.034	mg	202381	2576				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.008	mg	47619	606				
Die attach-2	M-015 Other organic materials	0.206	mg	supplier	glue	Amorphous silica	7631-86-9		0.086	mg	417476	6515				
				supplier	glue	Polyethylen terephthalate	25038-59-9		0.052	mg	252427	3939				
				supplier	glue	Acrylic resin	9003-01-4		0.034	mg	165049	2576				
				supplier	glue	Epoxyde bisphenol A resin	25068-38-6		0.034	mg	165049	2576				
				supplier	wire	Gold(Au)	7440-57-5		0.390	mg	989848	29545				
Bonding wire	M-008 Precious metals	0.394	mg	supplier	wire	Palladium(Pd)	7440-05-3		0.004	mg	10152	303				
				supplier	mold compound	Solid Epoxy Resin	proprietary		0.128	mg	49844	9697				
				supplier	mold compound	Hardener	proprietary		0.128	mg	49844	9697				
Encapsulation	M-015 Other organic materials	2.568	mg	supplier	mold compound	Carbon Black	1333-86-4		0.026	mg	10125	1970				
				supplier	mold compound	Amorphous silica-1	7631-86-9		0.231	mg	89953	17500				
				supplier	mold compound	Amorphous silica-2	60676-86-0		2.055	mg	800234	155682				