



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*	2024-12-12
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 : http://www.st.com/web/en/support/support.html		

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
STP25N018M9	XLDZ*M9BLP52	A	3068	2024-12-12
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	1900.00	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		
Not Applicable	Not Applicable	,		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00969186	
Package designator	Package size	Number of instances	Shape	
SIP	10.00x9.10x4.50	3	Through-hole	
Comment	TO 220 AB NON ISOL			

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
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)		True
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			True
Substance	amount in product (mg)	Application	ppm in product
Nickel	6.052	die - leadframe	3185
Lead	11.847	soft solder	6235

QueryList : REACH-7th November 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	11.847	Soft solder	6235
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	11.847	Soft solder	955018



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 :	Tin,

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 :						Mfr Item Name	XLDZ*M9BLP52					
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	23.986	mg	supplier	die	Silicon(Si)	7440-21-3		22.658	mg	944634	11926
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.450	mg	18761	237
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.133	mg	5545	70
				supplier	metallisation	Silver(Ag)	7440-22-4		0.110	mg	4586	58
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.129	mg	5378	68
				supplier	metallisation	Vanadium(V)	7440-62-2		0.010	mg	417	5
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.075	mg	3127	39
				supplier	passivation	Silicon oxide	7631-86-9		0.216	mg	9005	114
				supplier	polymer coating	polyimide	proprietary		0.205	mg	8547	108
				supplier	alloy	Copper(Cu)	7440-50-8		1251.376	mg	993909	658619
Leadframe	M-004 Copper and its alloys	1259.045	mg	supplier	alloy	Iron(Fe)	7439-89-6		1.253	mg	995	659
				supplier	alloy	Iron phosphide	26508-33-8		0.376	mg	299	198
				supplier	metallization	Nickel (Ni)	7440-02-0		5.919	mg	4701	3115
				supplier	metallization	Phosphorus (P)	7723-14-0		0.121	mg	96	64
				supplier	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temperat	11.847	mg	955018
Soft solder	Solder	12.405	mg	supplier	solder	Silver(Ag)	7440-22-4		0.310	mg	24990	163
				supplier	solder	Tin(Sn)	7440-31-5		0.248	mg	19992	131
				supplier	wire	Aluminium (Al)	7429-90-5		2.647	mg	1000000	1393
Bonding wires	M-003 Aluminum and its alloys	2.647	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.146	mg	993197	77
Bonding wires 2	M-003 Aluminum and its alloys	0.147	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	6803	1
Encapsulation	M-011 Other inorganic materials	470.740	mg	supplier	mold compound	Silica vitreous	60676-86-0		327.635	mg	695999	172439
				supplier	mold compound	Quartz	14808-60-7		47.074	mg	100000	24776
				supplier	mold compound	Phenol resin	9003-35-4		28.244	mg	59999	14865
				supplier	mold compound	Epoxy resin	proprietary		61.196	mg	130000	32208
				supplier	mold compound	Carbon black	1333-86-4		2.354	mg	5001	1239
				supplier	mold compound	Polyethylene resin	9002-88-4		1.883	mg	4000	991
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		1.883	mg	4000	991
				supplier	mold compound	Triphenylphosphine	603-35-0		0.471	mg	1001	248
Connections coating	Solder	131.030	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		131.030	mg	1000000	68963