



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-12-15
Company Unique ID	NL 008751171B01		
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	AMS 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 *	true	Legal Declaration *
		Standard

Legal Statement

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	Mfr Site	Date
L4931CZ33-AP	WRSX*LW33FC1	A	Z4XA	2020-12-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	250	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 Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	,		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	,	

Package Designator	Package Size	Nbr of instances	Shape	
SOT	1.77 x 1.95	42	0	
Comment	SX TO 92			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	
Query	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	
Query	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 3rd January 2020			
Query	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	0.02	alloy	60

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
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			
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-25th June 2020				
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
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	
Query	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 :	Gold, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	
Query	Response
The Product does contain at least one of the substances listed in Chemical Control Act	false
	Application Purpose

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date December 1st 2020	
Query	Response
The product contains adhesives identified under GB 33372	false

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	WRSX*LW33FC1	252.1680		6000001.0	1008672.0	
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	2.168	mg	supplier	die	Silicon(Si)	7440-21-3		2.098	mg	967712	8392
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.027	mg	12454	108
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.002	mg	923	8
				supplier	metallisation	Gold(Au)	7440-57-5		0.004	mg	1845	16
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.015	mg	6919	60
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.009	mg	4151	36
Leadframe	M-004 Copper and its alloys	85.900	mg	supplier	passivation	Silicon oxide	7631-86-9		0.013	mg	5996	52
				supplier	alloy	Copper(Cu)	7440-50-8		85.737	mg	998102	342948
				supplier	alloy	Iron(Fe)	7439-89-6		0.129	mg	1502	516
				supplier	alloy	P	7723-14-0		0.034	mg	396	136
Die attach	M-011 Other inorganic materials	2.973	mg	supplier	glue	Silicon(Si)	7440-21-3		2.098	mg	705684	8392
				supplier	glue	Silver Powder	7440-22-4		0.676	mg	227259	2703
				supplier	glue	Epoxy Resin A	9003-36-5		0.114	mg	38379	456
				supplier	glue	Epoxy Resin B	Trade Secret		0.011	mg	3804	45
				supplier	glue	Epoxy Resin C	Trade Secret		0.011	mg	3804	45
				supplier	glue	Diluent	3101-60-8		0.044	mg	14632	174
				supplier	glue	Dicyandiamide	461-58-5		0.002	mg	585	7
				supplier	glue	Bisphenol	92-88-6		0.017	mg	5853	70
Bonding wires	M-004 Copper and its alloys	0.039	mg	supplier	wire	Cu Wire	7440-50-8		0.039	mg	1000000	156
Encapsulation	M-011 Other inorganic materials	154.593	mg	supplier	mold compound	Si-oxide Quartz	14808-60-7		139.095	mg	899750	556380
				supplier	mold compound	Formaldehyde,polymer with oxirane and 2-me	29690-82-2		10.844	mg	70148	43378
				supplier	mold compound	Phenol-formaldehyde polymer	9003-35-4		3.879	mg	25091	15515
				supplier	mold compound	Carbon Black	1333-86-4		0.775	mg	5012	3099
Connections coating	Solder	6.495	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		6.495	mg	1000000	25980