



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 *	2021-06-09
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 *	Floriana SAN BIAGIO	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
	RVWV*UX64AA5	A	9992	2021-06-09
Amount	UoM	Unit type	ST ECOPACK Grade	
16	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	
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	,	

Package Designator	Package Size	Nbr of instances	Shape
DSO	0 x 0	5	Gull wing
Comment	WV SOT 23 5L; MDF is valid for LDK130M10R		

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 19th March 2021			
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	0.08	alloy	5188
Lead	0.00		0
Lead-Borate Glass	0.00		0
Lead Zirconate Titanate	0.00		0
Antimony trioxide	0.00		0
Bisphenol A	0.00		0

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
0	0	0	0	0

QueryList : REACH-19th January 2021				
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 in the component :	Gold, Tungsten,
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 1st December 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	RVWV*UX64AA5		15.9973		5000000.0	999839.0
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	0.334	mg	supplier	die	Silicon(Si)	7440-21-3		0.315	mg	943114	19688
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.004	mg	11976	250
				supplier	metallisation	Tungsten(W)	7440-33-7		0.003	mg	8982	188
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.001	mg	2994	63
				supplier	passivation	Silicon oxide	7631-86-9		0.007	mg	20958	438
				supplier	polymer coating	polyimide	proprietary		0.004	mg	11976	250
Leadframe	M-004 Copper and its alloys	7.200	mg	supplier	alloy	Copper (Cu)	7440-50-8		6.936	mg	963333	433500
				supplier	alloy	Iron (Fe)	7439-89-6		0.162	mg	22500	10125
				supplier	alloy	Phosphorus (P)	7723-14-0		0.002	mg	278	125
				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1250	563
				supplier	metallization	Nickel (Ni)	7440-02-0		0.083	mg	11528	5188
				supplier	metallization	Palladium (Pd)	7440-05-3		0.007	mg	972	438
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	139	63
				supplier	glue	Silver (Ag)	7440-22-4		0.056	mg	808081	3500
Die attach	M-015 Other organic materials	0.069	mg	supplier	glue	Carbocyclic Acrylates	proprietary		0.007	mg	101010	438
				supplier	glue	Bismaleimide resin	proprietary		0.002	mg	28860	125
				supplier	glue	2-preponoic acid, 2-methy	68586-19-6		0.002	mg	28860	125
				supplier	glue	Additive	Proprietary		0.002	mg	28860	125
				supplier	glue	Dicumyl peroxide	80-43-3		0.000	mg	4329	19
Bonding wires	M-004 Copper and its alloys	0.150	mg	supplier	wire	Copper (Cu)	7440-50-8		0.147	mg	980000	9188
				supplier	wire	Palladium (Pd)	7440-05-3		0.003	mg	20000	188
Encapsulation	M-015 Other organic materials	8.244	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.157	mg	19044	9813
				supplier	mold compound	Epoxy Resin-2	Proprietary		0.157	mg	19044	9813
				supplier	mold compound	Epoxy Resin-3	Proprietary		0.157	mg	19044	9813
				supplier	mold compound	Phenol resin	Proprietary		0.314	mg	38088	19625
				supplier	mold compound	Silica	60676-86-0		7.208	mg	874333	450500
				supplier	mold compound	Carbon Black	1333-86-4		0.016	mg	1941	1000
				supplier	mold compound	Others	Proprietary		0.235	mg	28506	14688