



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2021-06-08
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
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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
ST732M33R	1VWV*U1RSAA5	A	ZS1A	2021-06-08
	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	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	.	

Package Designator	Package Size	Nbr of instances	Shape	
DSO	2.9 x 1.6	5	Gull wing	
Comment	WV SOT 23 5L			

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			true
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			false
Substance	amount in product (mg)	Application	ppm in product

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GB 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-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	1VWV*U1RSAAS		16.0003		4999998.0	1000024.0
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	0.654	mg	supplier	die	Silicon(Si)	7440-21-3		0.617	mg	943425	38563
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.008	mg	12232	500
				supplier	metallisation	Tungsten(W)	7440-33-7		0.006	mg	9174	375
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.002	mg	3058	125
				supplier	passivation	Silicon oxide	7631-86-9		0.013	mg	19878	813
				supplier	polymer coating	polyimide	proprietary		0.008	mg	12232	500
Leadframe	M-004 Copper and Its alloys	6.793	mg	supplier	alloy	Copper(Cu)	7440-50-8		6.638	mg	977182	414875
				supplier	alloy	Iron(Fe)	7439-89-6		0.146	mg	21493	9125
				supplier	alloy	Phosphorus metal	7723-14-0		0.001	mg	147	63
				supplier	alloy	Palladium(Pd)	7440-05-3		0.007	mg	1030	438
				supplier	alloy	Gold(Au)	7440-57-5		0.001	mg	147	63
				supplier	glue	Aluminum oxide	1344-28-1		0.012	mg	349854	750
Die attach	M-011 Other inorganic materials	0.034	mg	supplier	glue	Ethyl acetate	112-15-2		0.009	mg	262391	563
				supplier	glue	Epoxy Resin	Proprietary		0.009	mg	262391	563
				supplier	glue	Epichlorohyd -bisphenol A resin	25068-38-6		0.002	mg	58309	125
				supplier	glue	Aromatic polyamine	Proprietary		0.002	mg	58309	125
				supplier	glue	Aminopropyltriethoxysilane	919-30-2		0.000	mg	8746	19
				supplier	wire	Copper (Cu)	7440-50-8		0.159	mg	987578	9938
Encapsulation	M-011 Other inorganic materials	8.358	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	12422	125
				supplier	mold compound	Solid Epoxy Resin-1	Proprietary		0.167	mg	20000	10448
				supplier	mold compound	Solid Epoxy Resin-2	Proprietary		0.167	mg	20000	10448
				supplier	mold compound	Phenol resin	Proprietary		0.334	mg	40000	20895
				supplier	mold compound	Amorphous Silica	60676-86-0		7.439	mg	890000	464914
				supplier	mold compound	Carbon Black	1333-86-4		0.042	mg	5000	2612
				supplier	mold compound	Crystalline silica	14808-60-7		0.209	mg	25000	13059
											0	