



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 *	2021-04-08
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 *	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
	BSWY*V801ALL	A	999L	2021-04-08
Amount	UoM	Unit type	ST ECOPACK Grade	
16.38	mg	Each	ECOPACK® 3	
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

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	Tin (Sn), matte, annealed	Copper Alloy	,	

Package Designator	Package Size	Nbr of instances	Shape	
DSO	2.9 x 1.6	5	Gull wing	
Comment	WY SOT 23-5; MDF is valid for LMV321LILT			

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 18th December 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

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-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 is the component :	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 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	BSWY*V801ALL		16.3869		600001.0	1000424.0
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	0.247	mg	supplier	die	Silicon(Si)	7440-21-3		0.236	mg	955466	14408
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.003	mg	12146	183
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.001	mg	4049	61
				supplier	passivation	Silicon oxide	7631-86-9		0.007	mg	28340	427
				supplier	alloy	Copper (Cu)	7440-50-8		4.911	mg	969978	299817
Leadframe	M-004 Copper and its alloys	5.063	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.114	mg	22516	6960
				supplier	alloy	Phosphorus (P)	7723-14-0		0.003	mg	593	183
				supplier	alloy	Zinc(Zn)	7440-66-6		0.005	mg	988	305
				supplier	metallization	Silver (Ag)	7440-22-4		0.030	mg	5925	1832
				supplier	glue	Silver	7440-22-4		0.811	mg	799500	49493
Die attach	M-015 Other organic materials	1.014	mg	supplier	glue	exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylmeth	7534-94-3		0.162	mg	160000	9905
				supplier	glue	ResinProprietary	Proprietary		0.030	mg	30000	1857
				supplier	glue	A mixture of: 4-allyl-2,6-bis (2,3-epoxypropyl)ep	Proprietary		0.005	mg	5000	310
				supplier	glue	Substituted silane	Proprietary		0.005	mg	5000	310
				supplier	glue	2-Methylhydroquinone	95-71-6		0.001	mg	500	31
Bonding wires	M-004 Copper and its alloys	1.021	mg	supplier	wire	Copper (Cu)	7440-50-8		0.990	mg	970000	60462
				supplier	wire	Palladium (Pd)	7440-05-3		0.031	mg	30000	1870
				supplier	mold compound	Epoxy Resin 1	Proprietary		0.241	mg	30000	14700
Encapsulation	M-015 Other organic materials	8.026	mg	supplier	mold compound	Epoxy Resin 2	Proprietary		0.120	mg	15000	7350
				supplier	mold compound	Hardener	Proprietary		0.321	mg	40000	19600
				supplier	mold compound	Catalyst	Proprietary		0.040	mg	5000	2450
				supplier	mold compound	Carbon black	1333-86-4		0.016	mg	2000	980
				supplier	mold compound	Amorphous silica1	60676-86-0		7.087	mg	883000	432659
Connections coating	Solder	1.016	mg	supplier	mold compound	Amorphous silica2	7631-86-9		0.201	mg	25000	12250
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.016	mg	1000000	62021