



## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2021-12-01
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Antonella Lanzafame	<b>Representative Title</b>	AMS Material Declaration champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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<b>Legal Statement</b>			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
TSC2012IYST	EBE3*UBBLABY	A	ZY1A	2021-12-01
Amount	UoM	Unit type	ST ECOPACK Grade	
28.00	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), immersion	Copper Alloy	.	

Package Designator	Package Size	Nbr of instances	Shape	
DSO	3 x 3	8	Gull wing	
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65			

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 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-8th July 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
	0			
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
	0			

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, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

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

Stockholm Convention Persistent Organic Pollutants	
Query	Response
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	true

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EBE3*UBBLABY		28.0003		5999999.0	1000009.0
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	2.231	mg	supplier	die	Silicon(Si)	7440-21-3		2.124	mg	952039	75857
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.021	mg	9413	750
				supplier	metallisation	Copper(Cu)	7440-50-8		0.004	mg	1793	143
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	448	36
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	2689	214
				supplier	passivation	Silicon oxide	7631-86-9		0.052	mg	23308	1857
				supplier	polymer coating	polyimide	proprietary		0.023	mg	10309	821
				supplier	alloy	Copper (Cu)	7440-50-8		11.217	mg	968402	400607
Leadframe	M-004 Copper and its alloys	11.583	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.270	mg	23310	9643
				supplier	alloy	Zinc (Zn)	7440-66-6		0.014	mg	1209	500
				supplier	alloy	Metallic Phosphorus (P)	7723-14-0		0.003	mg	259	107
				supplier	alloy	Silver (Ag)	7440-22-4		0.079	mg	6820	2821
				supplier	glue	Silver (Ag)	7440-22-4		0.109	mg	688600	3886
				supplier	glue	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.009	mg	55000	310
Die attach	M-011 Other inorganic materials	0.158	mg	supplier	glue	Dihydro-3-(tetrapropenyl)-2,5-furandione	26544-38-7		0.009	mg	55000	310
				supplier	glue	Epoxy resin	Proprietary		0.012	mg	75000	423
				supplier	glue	Dodecylloxirane	3234-28-4		0.009	mg	55000	310
				SVHC	glue	Hexahydro-5-methyl-1,3-isobenzofurandione;	25550-51-0		0.002	mg	11300	64
				supplier	glue	Copper oxide	1317-38-0		0.001	mg	5000	28
				supplier	glue	2,2'-(1,4-Butanediylbis(oxymethylene))bis(oxirane)	2425-79-8		0.009	mg	55000	310
				supplier	glue	Maleic anhydride	108-31-6		0.000	mg	100	1
				supplier	wire	Gold (Au)	7440-57-5		0.157	mg	990500	5625
Bonding wires	M-008 Precious metals	0.159	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9500	54
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	9500	54
Encapsulation	M-011 Other inorganic materials	13.294	mg	supplier	mold compound	Epoxy Resin	Proprietary		0.669	mg	50356	23909
				supplier	mold compound	Phenol Resin	Proprietary		0.669	mg	50356	23909
				supplier	mold compound	Silica Amorphous A (SiO2)	60676-86-0		10.000	mg	752203	357143
				supplier	mold compound	Silica Amorphous B (SiO2)	7631-86-9		1.942	mg	146078	69357
				supplier	mold compound	Carbon Black	1333-86-4		0.013	mg	1007	478
Connections coating	Solder	0.575	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.575	mg	1000000	20536