



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2021-01-07
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Representative Title</b>	AMS Material Declaration champion
<b>Authorized Representative *</b>	Floriana SAN BIAGIO	<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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Legal Statement		
<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
	1DO7*0081BE6	A	64BA	2021-01-07
Amount	UoM	Unit type	ST ECOPACK Grade	
77	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	4.9 x 3.9	8	Gull wing	
Comment	07 SO 08 .15 JEDEC; MDF is valid for LF351D			

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			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
Nickel	0.00		0
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 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
0	0	0	0	0

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 in 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 December 1st 2020	
Query	Response
The product contains adhesives identified under GB 33372	true
The adhesive complies with GB 33372	true

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	1D07*0081BE6		76.5010		600001.0	1000014.0
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	0.973	mg	supplier	die	Silicon(Si)	7440-21-3		0.956	mg	982528	12497
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.008	mg	8222	105
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.004	mg	4111	52
				supplier	passivation	Silicon oxide	7631-86-9		0.005	mg	5139	65
Leadframe	M-004 Copper and its alloys	28.765	mg	supplier	alloy	Copper(Cu)	7440-50-8		27.967	mg	972953	365843
				supplier	alloy	Iron(Fe)	7439-89-6		0.658	mg	22875	8601
				supplier	alloy	Iron phosphide	1310-43-6		0.040	mg	1391	523
				supplier	alloy	Zinc(Zn)	7440-66-6		0.035	mg	1217	458
				supplier	metallization	Silver (Ag)	7440-22-4		0.045	mg	1564	588
Die attach	M-015 Other organic materials	0.226	mg	supplier	glue	Silver(Ag)	7440-22-4		0.199	mg	880531	2601
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.011	mg	48673	144
				supplier	glue	Isobornyl acrylate	5888-33-5		0.011	mg	48673	144
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.005	mg	22124	65
Bonding wires	M-004 Copper and its alloys	0.038	mg	supplier	wire	Copper(Cu)	7440-50-8		0.038	mg	1000000	497
Encapsulation	M-015 Other organic materials	45.781	mg	supplier	mold compound	Silica vitreous	60676-86-0		32.779	mg	715996	428484
				supplier	mold compound	Silicon oxide	7631-86-9		6.867	mg	149997	89765
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		3.434	mg	75009	44889
				supplier	mold compound	Phenol resin	26834-02-6		2.289	mg	49999	29922
				supplier	mold compound	Carbon black	1333-86-4		0.229	mg	5002	2993
				supplier	mold compound	Bismuth compound	7440-69-9		0.183	mg	3997	2392
Connections coating	Solder	0.718	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.718	mg	1000000	9386