



## 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>	2022-10-24
<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>	giovanni giacopello	<b>Representative Title</b>	ADG 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**


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
BALFHB-WL-05D3	LD6(*BLNWLSA	A	3068	2022-10-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	4	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
Not Applicable	260	.		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	NA	Copper Alloy	DM00900796	

Package Designator	Package Size	Nbr of instances	Shape
BARE DIE	1.92x2.20x0.40	Not Applicable	Not Applicable
Comment	CSPG 0.4		

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)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description
7c-1	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

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
10(a)	10(a) - Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs, — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d)

QueryList : California Prop65 list, dated 17th Dec 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	0.257	die	65897
Lead-Borate Glass	2.747	die	704359

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				true
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
Hazardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-17 Jan 2022				
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 :	Gold, Tantalum, 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

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	LD6(*BLNWL5A									
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	3.678	mg	supplier	metallisation	Aluminium(Al)	7429-90-5		0.083	mg	22567	21282				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.343	mg	93257	87949				
				supplier	metallisation	Gold(Au)	7440-57-5		0.053	mg	14410	13590				
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.257	mg	69875	65897				
				supplier	metallisation	Silver(Ag)	7440-22-4		0.004	mg	1088	1026				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.025	mg	6797	6410				
				supplier	metallisation	Tin(Sn)	7440-31-5		0.095	mg	25829	24359				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	1088	1026				
				supplier	passivation	Silicon oxide	7631-86-9		0.005	mg	1350	1282				
				JIG-R & California 65	glass	Lead-BorateGlass	65997-18-4	7c-I-Electrical and electronic	2.747	mg	746873	704359				
				supplier	polymer coating	Polymer resist-Benzocyclobutene(BCB)	694-87-1		0.062	mg	16857	15897				
				Back side coating	M-015 Other organic materials	0.222	mg	supplier	resin	Silica vitreous	60676-86-0		0.108	mg	486486	27692
								supplier	resin	Epoxy type resin	proprietary		0.039	mg	175676	10000
								supplier	resin	Acrylic type polymer	proprietary		0.039	mg	175676	10000
supplier	resin	Bisphenol A diglycidyl ether	25036-25-3						0.013	mg	58557	3333				
supplier	resin	Carbon black	1333-86-4						0.001	mg	4505	256				
supplier	resin	Iron compound	7439-89-6						0.011	mg	49550	2821				
				supplier	resin	Zinc compound	7440-66-6		0.011	mg	49550	2821				