



## Materials Declaration Form

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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-05-12</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<b>Giovanni Giacopello</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>
		<b>Standard</b>

**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
BAT60JFILM	HJW3*NHBAT60	B	9955	2020-05-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	5	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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Alloy 42		

  
 life.augmented

Package Designator	Size	Nbr of instances	Shape	
DSO	1.15 - 1.64 - 1.04	2	gull wing	
Comment	Package: SOD 323			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-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

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
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	0.53	Die - Leadframe	105200

QueryList : REACH-16th January 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

Material Composition Declaration :						Mfr Item Name	HJW3*NHBAT60					
note : Substance present with less 0.001mg will not be declared in this document												
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	0.276	mg	supplier	die	Silicon (Si)	7440-21-3		0.268	mg	971014	53600
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	7246	400
				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	3623	200
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	3623	200
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	3623	200
				supplier	Passivation	Silicon Oxide	7631-86-9		0.002	mg	7248	400
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	3623	200
Leadframe	M-002 Other ferrous alloys, non-stair	1.330	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.738	mg	554887	147600
				supplier	alloy	Nickel (Ni)	7440-02-0		0.525	mg	394737	105000
				supplier	alloy	Silicon (Si)	7440-21-3		0.002	mg	1504	400
				supplier	alloy	Cobalt (Co)	7440-48-4		0.006	mg	4511	1200
				supplier	alloy	Chromium (Cr)	7440-47-3		0.001	mg	752	200
				supplier	alloy	Manganese (Mn)	7439-96-5		0.008	mg	6015	1600
				supplier	metallization	Silver (Ag)	7440-22-4		0.050	mg	37594	10000
Bonding wires	M-008 Precious metals	0.024	mg	supplier	wire	Gold (Au)	7440-57-5		0.024	mg	1000000	4800
Encapsulation	M-011 Other inorganic materials	3.216	mg	supplier	mold compound	silica vitreous	60676-86-0		2.808	mg	873134	561600
				supplier	mold compound	aromatic amine	Proprietary		0.080	mg	24876	16000
				supplier	mold compound	Phenol Resin	26834-02-6		0.161	mg	50062	32200
				supplier	mold compound	epoxy resin	29690-82-2		0.161	mg	50062	32200
				supplier	mold compound	carbon black	1333-86-4		0.006	mg	1866	1200
connections coating	Solder	0.154	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.154	mg	1000000	30800