



## 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

*\* : Required Field*

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-02-03
<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>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMS MD 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
0	EBE3*S219ACJ	B	9998-ZY1A	2020-02-03
Amount	UoM	Unit type	ST ECOPACK Grade	
23.7	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	0	

Package Designator	Size	Nbr of instances	Shape
DSO	3 x 3	8	gull wing
Comment	E3 MSOP/TSSOP 8 BODY3.00 PITCH0.65; MDF is valid for STC3100IST		

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)			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 2017/2096 _November 2017			
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			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	0.31	Leadframe	13163

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

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
,	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
,	#N/A		,	

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				NO
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EBE3*S219ACJ				4982944.0	999284.0
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	1.575	mg	supplier	die	Silicon(Si)	7440-21-3		1.483	mg	941587	62574
				supplier	die	Silicium carbide	409-21-2		0.000	mg	0	0
				supplier	die	Mica	12001-26-2		0.000	mg	0	0
				supplier	die	Gallium Arsenide	1303-00-0		0.000	mg	0	0
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.018	mg	11429	759
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	1905	127
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	1270	84
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.006	mg	3810	253
Leadframe	M-004 Copper and its alloys	11.504	mg	supplier	passivation	Silicon oxide	7631-86-9		0.036	mg	22857	1519
				supplier	alloy & coating	Copper(Cu)	7440-50-8		11.118	mg	966446	469114
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.312	mg	27121	13165
				supplier	alloy & coating	Magnesium(Mg)	7439-95-4		0.016	mg	1391	675
				supplier	alloy & coating	Silicon(Si)	7440-21-3		0.053	mg	4607	2236
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.005	mg	435	211
Die attach	M-015 Other organic materials	1.232	mg	supplier	alloy & coating	Gold(Au)	7440-57-5		0.001	mg	87	42
				supplier	glue	Silver (Ag)	7440-22-4		0.860	mg	698312	36300
				supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin	9003-36-5		0.068	mg	55130	2866
				supplier	glue	Fatty acids	68475-94-5		0.045	mg	36753	1911
				supplier	glue	.gamma. Butyrolactone	96-48-0		0.045	mg	36753	1911
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.045	mg	36753	1911
				supplier	glue	Epoxy Resin	Proprietary		0.045	mg	36753	1911
				supplier	glue	Copper Oxide	1317-38-0		0.111	mg	90357	4697
Bonding wires	M-008 Precious metals	0.078	mg	supplier	glue	Epoxy Resin Modifier	Proprietary		0.006	mg	4594	239
				supplier	glue	Substituted Silane	Proprietary		0.006	mg	4594	239
Encapsulation	M-015 Other organic materials	9.320	mg	supplier	wire	Gold (Au)	7440-57-5		0.078	mg	1000000	3291
				supplier	mold compound	Epoxy Resin	Proprietary		0.882	mg	94592	37198
				supplier	mold compound	Silica Amorphous A (SiO2)	60676-86-0		5.964	mg	639914	251646
				supplier	mold compound	Silica Amorphous B (SiO2)	7631-86-9		1.678	mg	180043	70802
				supplier	mold compound	Phenol Resin	205830-20-2		0.750	mg	80423	31626
				supplier	mold compound	Other Bismuth Compounds	Proprietary		0.004	mg	457	180
				supplier	mold compound	Carbon black	1333-86-4		0.043	mg	4571	1797