



## 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

\* : Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2020-06-15
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier comment section	<b>Contact Title</b>	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**

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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
ESDX051-2BU3	KC2S*V2U6ET1	A	SH1A	2020-06-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	0.1200	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			

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	Not Applicable	Not Applicable	DM00562959	



Package Designator	Size	Nbr of instances	Shape	
WLB	0.61 x 0.3 x 0.225	2	bulk solder	
Comment	Bumped die			

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 requirement without any exemptions	TRUE
2 - Product(s) meets EU ELV 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	0.0002	Die metallisation , no possible contact	1675

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 Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material

Material Composition Declaration						Mfr Item Name	KC2S*V2U6ET1					
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	0.101	mg	supplier	die	Silicon(Si)	7440-21-3		0.0965	mg	960190	804162
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.0007	mg	6965	5833
				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.0010	mg	9950	8333
				supplier	passivation	Silicon Oxide	7631-86-9		0.0010	mg	9950	8333
				supplier	Back-side metallisation	Aluminium(Al)	7429-90-5		0.0010	mg	9950	8333
				supplier	UBM	Titanium(Ti)	7440-32-6		0.0001	mg	995	833
				supplier	UBM	Nickel(Ni)	7440-02-0		0.0002	mg	2000	1675
Bumps	Solder	0.004	mg	supplier	bumps	Tin(Sn)	7440-31-5		0.0036	mg	972973	30000
				supplier	bumps	Silver(Ag)	7440-22-4		0.0001	mg	27027	833
Back side coating	M-015 Other organic materials	0.008	mg	supplier	resin	Silica vitreous	60676-86-0		0.0038	mg	487180	31667
				supplier	resin	Epoxy and acrylic resin	proprietary		0.0028	mg	358974	23333
				supplier	resin	Bisphenol A diglycidyl ether	25036-25-3		0.0004	mg	51282	3333
				supplier	resin	Iron compound	7439-89-6		0.0004	mg	51282	3333
				supplier	resin	Zinc compound	7440-66-6		0.0004	mg	51282	3333
Edges encapsulation	M-015 Other organic materials	0.008	mg	supplier	mold compound	Silica vitreous	60676-86-0		0.0060	mg	750000	50000
				supplier	mold compound	Modified epoxy resin	proprietary		0.0010	mg	125000	8333
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		0.0010	mg	125000	8333