



## 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>	2018-09-11
<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>	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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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
	MZK0*U1A1CA5	B	SH1A	2018-09-11
Amount	UoM	Unit type	ST ECOPACK Grade	
0.717	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Tin/Silver/Copper (SAC105)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
WAFER	0.8x0.8x0.36	4	NAC	
Comment	CSPS0.4 4-6; MDF valid for LD39115J14R			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 2015	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-27th June 2018				
Query				Response
The product 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

Material Composition Declaration						Mfr Item Name	MZK0*U1A1CAS					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Wafer	Other inorganic materials	0.717	mg	supplier	die	Silicon (Si)	7440-21-3		0.575	mg	801953	809859
Wafer				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	6974	7042
Wafer				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	5579	5634
Wafer				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.001	mg	1395	1408
Wafer				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.008	mg	11158	11268
Wafer				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.005	mg	6974	7042
UBM				supplier	UBM	Copper (Cu)	7440-50-8		0.004	mg	5579	5634
UBM				supplier	UBM	Titanium (Ti)	7440-32-6		0.001	mg	1395	1408
UBM				supplier	UBM	Nickel (Ni)	7440-02-0		0.003	mg	4184	4225
Bump				supplier	bump	Tin (Sn)	7440-31-5		0.109	mg	152022	153521
Bump				supplier	bump	Silver (Ag)	7440-22-4		0.001	mg	1395	1408
Bump				supplier	bump	Copper (Cu)	7440-50-8		0.001	mg	1395	1408