



## 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>	2017-08-23
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Floriana San Biagio	<b>Representative Title</b>	AMG 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
	AYXU*Q6AAG2B	A	SA1A	2017-08-23
Amount	UoM	Unit type	ST ECOPACK Grade	
20.00	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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2x3x0.75	12	No lead	
Comment	Package: XU MLPD/DFN 2x3x0.75 12L PITCH 0.5; MDF valid for SRC0GS22D			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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 : REACH-12th January 2017				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AYXU*Q6AAG28									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die	Other Inorganic materials	0.824	mg	supplier	die	Silicon (Si)	7440-21-3		0.780	mg	947942	39050				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	9710	400				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	4855	200				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1214	50				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	4855	200				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.020	mg	24275	1000				
				supplier	Passivation	Polyhydroxyamide	55295-98-2		0.002	mg	2294	95				
				supplier	Passivation	PIX1 Gamma-butyrolactone	96-48-0		0.004	mg	4855	200				
				Leadframe	Copper & its alloys	7.850	mg	supplier	alloy	Copper (Cu)	7440-50-8		7.560	mg	963312	378100
								supplier	alloy	Iron (Fe)	7439-89-6		0.177	mg	22548	8850
supplier	alloy	Phosphorus (P)	12185-10-3						0.002	mg	255	100				
supplier	alloy	Zinc (Zn)	7440-66-6						0.010	mg	1274	500				
supplier	metallization	Nickel (Ni)	7440-02-0						0.090	mg	11465	4500				
supplier	metallization	Palladium (Pd)	7440-05-3						0.008	mg	1019	400				
supplier	metallization	Gold (Au)	7440-57-5						0.001	mg	127	50				
Die attach	Other Organic Materials	0.180	mg					supplier	glue	Aluminium oxide	1344-28-1		0.054	mg	300000	2700
								supplier	glue	Diethylene glycol monoethyl ether acetate	112-15-2		0.072	mg	400000	3600
								supplier	glue	Epoxy resin	25068-38-6		0.013	mg	72222	650
				supplier	glue	Epoxy resin	Proprietary		0.036	mg	200000	1800				
				supplier	glue	Aromatic amine	Proprietary		0.005	mg	27778	250				
				supplier	wire	Gold (Au)	7440-57-5		0.259	mg	1000000	12950				
Bonding wires	Precious metals	0.259	mg	supplier	wire	Gold (Au)	7440-57-5		0.259	mg	1000000	12950				
				Encapsulation	Other Organic Materials	10.893	mg	supplier	mold compound	Silica Fused	60676-86-0		10.203	mg	936932	510300
								supplier	mold compound	Epoxy Resin	29690-82-2		0.327	mg	30019	16350
								supplier	mold compound	Phenol Resin	9003-35-4		0.327	mg	30019	16350
supplier	mold compound	Carbon Black	1333-86-4		0.033	mg	3029	1650								