



## 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>2018-02-07</b>
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Representative Title</b>	<b>AMS MD CHAMPION</b>
<b>Authorized Representative *</b>	<b>Floriana SAN BIAGIO</b>	<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>	<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
	1C9U*UQ40J5F	A	MU1A	2018-02-07
Amount	UoM	Unit type	ST ECOPACK Grade	
653.4	mg	Each	ECOPACK® 1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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		

Package Designator	Size	Nbr of instances	Shape	
DSO	7.5x15.4x2.50	24	gull wing	
Comment	9U SO 24 .30 TO JEDEC MS-013AD; MDF valid for STP16CP05MTR			

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	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
Exemption Id.	Description

QueryList : REACH-15th January 2018				
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

Material Composition Declaration :						Mfr Item Name	1C9U*UQ405F				5000000.0	1000000.0	
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	1.793	mg	supplier	die	Silicon (Si)	7440-21-3		1.709	mg	953151	2616	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.018	mg	10039	28	
				supplier	metallization	Tungsten (W)	7440-33-7		0.014	mg	7808	21	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2231	6	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.030	mg	16732	46	
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.018	mg	10039	28	
Leadframe	M-004 Copper and its alloys	224.773	mg	supplier	alloy	Copper (Cu)	7440-50-8		217.117	mg	965939	332288	
				supplier	alloy	Iron (Fe)	7439-89-6		5.107	mg	22721	7816	
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.308	mg	1370	471	
				supplier	alloy	Zinc (Zn)	7440-66-6		0.267	mg	1188	409	
	M-006 Nickel and its alloys				supplier	metallization	Nickel (Ni)	7440-02-0		1.810	mg	8053	2770
					supplier	metallization	Palladium (Pd)	7440-05-3		0.116	mg	516	178
	M-008 Precious metals				supplier	metallization	Gold (Au)	7440-57-5		0.048	mg	214	73
					supplier	metallization	Gold (Au)	7440-57-5		0.048	mg	214	73
Die attach	M-015 Other organic materials	0.435	mg	supplier	glue	Silver (Ag)	7440-22-4		0.335	mg	770115	513	
				supplier	glue	Epoxy Cresol Novolak	29690-82-2		0.098	mg	225287	150	
				supplier	glue	1-Isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.002	mg	4598	3	
Bonding wires	M-008 Precious metals	0.586	mg	supplier	wire	Gold (Au)	7440-57-5		0.586	mg	1000000	897	
Encapsulation	M-011 Other inorganic materials	425.813	mg	supplier	mold compound	Silica, vitreous	60676-86-0		350.444	mg	823000	536339	
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		29.807	mg	70000	45618	
				supplier	mold compound	Phenol resin	9003-35-4		17.033	mg	40001	26068	
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		12.774	mg	29999	19550	
				supplier	mold compound	Antimony Trioxide	1309-64-4		5.110	mg	12001	7821	
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		8.516	mg	19999	13033	
				supplier	mold compound	Carbon black	1333-86-4		2.129	mg	5000	3258	