



## 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>	2018-04-26
<b>Company Unique ID</b>	NL 008751171801		
<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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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**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
	1GI0*UAQ6ABA	A	ZY1A	2018-04-26
Amount	UoM	Unit type	ST ECOPACK Grade	
59.4	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 ( in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5x4.4x1	16	gull wing	
Comment	I0 HTSSOP 16 4.4 PITCH 0.65 EXPAD; MDF valid for L6986F			

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
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	1G10*UAQ6ABA				5999999.0	1000003.0
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	3.474	mg	supplier	die	Silicon (Si)	7440-21-3		3.158	mg	909039	53165
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	5469	320
				supplier	metallization	Copper (Cu)	7440-50-8		0.178	mg	51238	2997
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	576	34
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	864	51
				supplier	Passivation	Silicon Nitride	12033-89-5		0.009	mg	2591	152
				supplier	Passivation	Silicon Oxide	7631-86-9		0.084	mg	24180	1414
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	576	34
				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1727	101
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.012	mg	3454	202
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	288	17
				supplier	alloy	Copper (Cu)	7440-50-8		31.425	mg	943014	529040
				Leadframe	M-004 Copper and its alloys	33.324	mg	supplier	alloy	Iron (Fe)	7439-89-6	
supplier	alloy	Phosphorous (P)	7723-14-0						0.009	mg	270	152
supplier	alloy	Zinc (Zn)	7440-66-6						0.039	mg	1170	657
supplier	alloy	Silver (Ag)	7440-22-4						1.094	mg	32829	18418
supplier	glue	Epoxy resin	9003-36-5						0.134	mg	199108	2256
supplier	glue	Silver (Ag)	7440-22-4						0.505	mg	750371	8502
Die Attach	M-015 Other organic materials	0.673	mg	supplier	glue	Aromatic amine	Proprietary		0.034	mg	50520	572
				supplier	wire	Gold (Au)	7440-57-5		0.476	mg	1000000	8013
Bonding wires	M-008 Precious metals	0.476	mg	supplier	wire	Gold (Au)	7440-57-5		0.476	mg	1000000	8013
				supplier	mold compound	Epoxy resin	29690-82-2		2.013	mg	99955	33889
Encapsulation	M-015 Other organic materials	20.139	mg	supplier	mold compound	Silica fused (SiO2)	60676-86-0		17.724	mg	880083	298384
				supplier	mold compound	Phenol Resin	25068-38-6		0.302	mg	14996	5084
Finishing	M-011 Other inorganic materials	1.314	mg	supplier	mold compound	Carbon Black	1333-86-4		0.100	mg	4965	1684
				supplier	connection coating	Tin (Sn)	7440-31-5		1.314	mg	1000000	22121