



## 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>	2018-04-09
<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
	FBI0*UP62J51	A	ZY1A	2018-04-09
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
1	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 STP04CM05XTTR			

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	FBIO*UP62J51				6000000.0	999982.0
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	1.781	mg	supplier	die	Silicon (Si)	7440-21-3		1.707	mg	958450	28737
				supplier	metallization	Aluminium (Al)	7429-90-5		0.011	mg	6176	185
				supplier	metallization	Tungsten (W)	7440-33-7		0.014	mg	7861	236
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2246	67
				supplier	Passivation	Silicon Oxide	7631-86-9		0.037	mg	20775	623
				supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.008	mg	4492	135
Leadframe	M-004 Copper and its alloys	26.823	mg	supplier	alloy	Copper (Cu)	7440-50-8		25.534	mg	951944	429865
				supplier	alloy	Nickel (Ni)	7440-02-0		0.796	mg	29676	13401
				supplier	alloy	Silicon (Si)	7440-21-3		0.173	mg	6450	2912
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.040	mg	1491	673
				supplier	metallization	Silver (Ag)	7440-22-4		0.280	mg	10439	4714
				supplier	glue	Silver (Ag)	7440-22-4		0.461	mg	760726	7761
Die attach	M-015 Other organic materials	0.606	mg	supplier	glue	Reaction product: bisphenol-F-(epichlorhydrin	9003-36-5		0.043	mg	70957	724
				supplier	glue	Fatty acids, C18-unsatd., dimers, polymers wit	68475-94-5		0.024	mg	39604	404
				supplier	glue	.gamma. Butyrolactone	96-48-0		0.024	mg	39604	404
				supplier	glue	Polyoxyalkylene amine	9046-10-0		0.024	mg	39604	404
				supplier	glue	Epoxy Resin	29690-82-2		0.024	mg	39604	404
				supplier	glue	Epoxy Resin Modifier	Proprietary		0.003	mg	4950	51
				supplier	glue	Substituted Silane	Proprietary		0.003	mg	4950	51
				supplier	wire	Gold (Au)	7440-57-5		0.393	mg	1000000	6616
Bonding wires	M-008 Precious metals	0.393	mg	supplier	wire	Gold (Au)	7440-57-5		0.393	mg	1000000	6616
				supplier	molding compound	Epoxy Resin	29690-82-2		2.259	mg	79990	38030
				supplier	molding compound	Silica Amorphous A (SiO2)	60676-86-0		19.769	mg	700011	332811
				supplier	molding compound	Silica Amorphous B (SiO2)	7631-86-9		4.236	mg	149995	71313
				supplier	molding compound	Phenol Resin	205830-20-2		1.822	mg	64516	30673
Encapsulation	M-015 Other organic materials	28.241	mg	supplier	molding compound	Other Bismuth Compounds	Proprietary		0.014	mg	496	236
				supplier	molding compound	Carbon black	1333-86-4		0.141	mg	4993	2374
				supplier	molding compound	Carbon black	1333-86-4		0.141	mg	4993	2374
Finishing	M-011 Other inorganic materials	1.555	mg	supplier	connection coating	Tin (Sn)	7440-31-5		1.555	mg	1000000	26178