



## 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>	2018-03-12
<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
	MYYG*UT92AAAY	A	SA1A	2018-03-12
Amount	UoM	Unit type	ST ECOPACK Grade	
24.4	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	
QFN	3x3	6	flat	
Comment	YG VFDFPN 6 3X3 0,95 PITCH; MDF valid for LDS3985PU18RY			

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	MYYG*UT92AAY				6000001.0	1002093.0
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	0.881	mg	supplier	die	Silicon (Si)	7440-21-3		0.833	mg	945516	34139
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	7946	287
				supplier	metallization	Tungsten (W)	7440-33-7		0.012	mg	13621	492
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2270	82
				supplier	Passivation	Silicon Oxide	7631-86-9		0.017	mg	19296	697
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.001	mg	1135	41
Leadframe	M-004 Copper and its alloys	9.030	mg	supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.009	mg	10216	369
				supplier	alloy	Copper (Cu)	7440-50-8		8.722	mg	965892	357463
				supplier	alloy	Iron (Fe)	7439-89-6		0.204	mg	22558	8348
				JIG - R	alloy	Lead (Pb)	7439-92-1		0.000	mg	33	12
				supplier	alloy	Phosphorus (P)	7723-14-0		0.002	mg	244	90
				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1274	471
Die attach	M-015 Other organic materials	0.140	mg	supplier	alloy	Silver (Ag)	7440-22-4		0.090	mg	10000	3701
				supplier	glue	Silver (Ag)	7440-22-4		0.119	mg	850000	4877
				supplier	glue	Carbocyclic acrylate (10 -30%)	proprietary		0.014	mg	100000	574
				supplier	glue	2-Propenoic acid, 2-methyl-, 2-[(2,3,3a,4,7,7a)-2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane]	68586-19-6		0.006	mg	45000	258
Bonding wires	M-008 Precious metals	0.180	mg	supplier	glue	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.001	mg	5000	29
				supplier	wire	Gold (Au)	7440-57-5		0.180	mg	1000000	7377
Encapsulation	M-015 Other organic materials	13.600	mg	supplier	molding compound	Silica Fused	60676-86-0		12.743	mg	937000	522262
				supplier	molding compound	Epoxy Resin	29690-82-2		0.408	mg	30000	16721
				supplier	molding compound	Phenol Resin	25068-38-6		0.408	mg	30000	16721
				supplier	molding compound	Carbon Black	1333-86-4		0.041	mg	3000	1672
Finishing	M-011 Other inorganic materials	0.620	mg	supplier	connection coating	Tin (Sn)	7440-31-5		0.620	mg	1000000	25410