



## 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>	2017-12-01
<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>	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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**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
	MQYG*UI99AB5	A	Z6HA	2017-12-01
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
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	
QFN	3x3x0.95	6	flat	
Comment	Package: YG VFDFPN 6 3X3 0,95 PITCH; MDF valid for LDL212PUR			

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-7th July 2017				
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	MQYG*UI99A85				6000003.0	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	0.387	mg	supplier	die	Silicon (Si)	7440-21-3		0.362	mg	935401	14836	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	12920	205	
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	10336	164	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2584	41	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	23256	369	
				supplier	polymer die coating	PIIX1 Gamma-butyrolactone	96-48-0		0.006	mg	15504	246	
Leadframe	M-004 Copper and its alloys	8.966	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.660	mg	965871	354918	
				supplier	alloy	Iron (Fe)	7439-89-6		0.202	mg	22530	8279	
					JIG - R	alloy	Lead (Pb)	7439-92-1		0.001	mg	112	41
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	223	82	
				supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	1227	451	
				supplier	metallization	Silver (Ag)	7440-22-4		0.090	mg	10038	3689	
Die attach	M-015 Other organic materials	0.093	mg	supplier	glue	Silver (Ag)	7440-22-4		0.077	mg	827957	3156	
				supplier	glue	Carbocyclic Acrylates	proprietary		0.009	mg	96774	369	
				supplier	glue	Bismaleimide resin	35325-39-4		0.003	mg	32258	123	
				supplier	glue	2-preponic acid, 2-methyl	68586-19-6		0.003	mg	32258	123	
				supplier	glue	Dicumyl peroxide	80-43-3		0.001	mg	10753	41	
Bonding wires	M-011 Other inorganic materials	0.089	mg	supplier	wire	Copper (Cu)	7440-50-8		0.087	mg	977528	3566	
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	22472	82	
Encapsulation	M-015 Other organic materials	14.658	mg	supplier	mold compound	Silica Fused	60676-86-0		13.734	mg	936963	562869	
				supplier	mold compound	Epoxy Resin	25068-38-6		0.440	mg	30018	18033	
				supplier	mold compound	Phenol Resin	29690-82-2		0.441	mg	30086	18074	
				supplier	mold compound	Carbon Black	1333-86-4		0.043	mg	2934	1762	
connections coating	M-011 Other inorganic materials	0.207	mg	supplier	solder	Tin (Sn)	7440-31-5		0.207	mg	1000000	8484	