



## 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>	2018-11-20
<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
	NEV0*MY16AAA	A	Z7GA	2018-11-20
Amount	UoM	Unit type	ST ECOPACK Grade	
130	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	7x7x1	48	flat	
Comment	V0 VFQFPN 7x7x1.0 48 PITCH 0.5; MDF valid for STSPIN32F0ATR			

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-27th June 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	NEV0*MY16AAA				6999999.0	999994.0				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	M-011 Other inorganic materials	5.158	mg	supplier	die	Silicon (Si)	7440-21-3		4.191	mg	812524	32238				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	6204	246				
				supplier	metallization	Copper (Cu)	7440-50-8		0.524	mg	101590	4031				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.015	mg	2908	115				
				supplier	passivation	Nickel (Ni)	7440-02-0		0.056	mg	10857	431				
				supplier	metallization	Platinum (Pt)	7440-06-4		0.031	mg	6010	238				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	1745	69				
				supplier	metallization	Tungsten (W)	7440-33-7		0.034	mg	6592	262				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.024	mg	4653	185				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.193	mg	37418	1485				
				supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.008	mg	1551	62				
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.041	mg	7949	315				
				Leadframe	M-004 Copper and its alloys	48.904	mg	supplier	alloy	Copper (Cu)	7440-50-8		47.383	mg	968898	364485
								supplier	alloy	Iron (Fe)	7439-89-6		1.114	mg	22779	8569
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.067	mg	1370	515				
supplier	alloy	Zinc (Zn)	7440-66-6						0.059	mg	1206	454				
supplier	metallization	Silver (Ag)	7440-22-4						0.281	mg	5746	2162				
supplier	glue	Silver (Ag)	7440-22-4						1.360	mg	800000	10462				
Die attach1	M-015 Other organic materials	1.700	mg	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.144	mg	84706	1108				
				supplier	glue	methylene diacrylate mg	42594-17-2		0.102	mg	60000	785				
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.085	mg	50000	654				
				supplier	glue	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.009	mg	5294	69				
				supplier	tape	amorphous silica	7631-86-9		0.151	mg	430199	1162				
Die attach 2	M-015 Other organic materials	0.351	mg	supplier	tape	polyethylen terephthalate	25038-59-9		0.147	mg	418803	1131				
				supplier	tape	Acrylic resin	2594322		0.034	mg	96866	262				
				supplier	tape	Bisphenol A diglycidyl ether mg	25036-25-3		0.019	mg	54131	146				
				supplier	wire	Gold (Au)	7440-57-5		0.774	mg	1000000	5954				
Bonding wires	M-008 Precious metals	0.774	mg	supplier	compound	Silica, vitreous	60676-86-0		61.637	mg	864014	474131				
				supplier	compound	Epoxy Resin	29690-82-2		5.350	mg	74995	41154				
				supplier	compound	Phenol Resin	25068-38-6		3.567	mg	50001	27438				
				supplier	compound	3-Mercaptopropyl trimethoxysilane mg	4420-74-0		0.356	mg	4990	2738				
				supplier	compound	Quartz	14808-60-7		0.214	mg	3000	1646				
Encapsulation	M-015 Other organic materials	71.338	mg	supplier	compound	Carbon black	1333-86-4		0.214	mg	3000	1646				
				supplier	connection coating	Tin (Sn)	7440-31-5		1.774	mg	1000000	13646				
Finishing	M-011 Other inorganic materials	1.774	mg	supplier	connection coating	Tin (Sn)	7440-31-5		1.774	mg	1000000	13646				