



## 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>	2018-10-05
<b>Company Unique ID</b>	NL 008751171B01		
<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

**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
	KKO7*VNM2B36	A	SH1A	2018-10-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	80	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85x3.9x1.52	8	gull wing	
Comment	07 SO 08 .15 JEDEC;MDF valid for VN751STR			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	KKO7*VNM2B36				500000.0	1000006.0
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	4.804	mg	supplier	die	Silicon (Si)	7440-21-3		4.669	mg	971898	58363
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	6037	363
				supplier	Passivation	Silicon Nitride	12033-89-5		0.033	mg	6869	413
				supplier	Passivation	Silicon Oxide	7631-86-9		0.032	mg	6661	400
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	416	25
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	1457	88
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.032	mg	6661	400
Leadframe	M-004 Copper and its alloys	29.872	mg	supplier	alloy	Copper (Cu)	7440-50-8		28.833	mg	965218	360413
				supplier	alloy	Iron (Fe)	7439-89-6		0.678	mg	22697	8475
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.041	mg	1373	513
				supplier	alloy	Zinc (Zn)	7440-66-6		0.036	mg	1205	450
				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	1473	550
	supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	33	13			
	supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	67	25			
	supplier	metallization	Silver (Ag)	7440-22-4		0.237	mg	7934	2963			
	supplier	metallization	Silver (Ag)	7440-22-4		1.518	mg	891892	18975			
	supplier	glue	Isobornyl Methacrylate	7534-94-3		0.119	mg	69918	1488			
Die attach	M-015 Other organic materials	1.702	mg	supplier	glue	Bismaleimide resin	Proprietary		0.051	mg	29965	638
				supplier	glue	Epoxy-cyclohexylethyltrimethoxysilane	3388-04-3		0.014	mg	8226	175
				supplier	wire	Gold (Au)	7440-57-5		0.254	mg	1000000	3175
				supplier	glue	Silica, vitreous	60676-86-0		37.556	mg	865984	469450
Bonding wires	M-008 Precious metals	0.254	mg	supplier	glue	Epoxy Resin	85954-11-6		3.253	mg	75009	40663
				supplier	glue	Phenol Resin	26834-02-6		2.168	mg	49991	27100
				supplier	glue	Carbon black	1333-86-4		0.217	mg	5004	2713
				supplier	glue	Bismuth compound	7440-69-9		0.174	mg	4012	2175
Encapsulation	M-015 Other organic materials	43.368	mg	supplier	mold compound	Silica, vitreous	60676-86-0		37.556	mg	865984	469450
				supplier	mold compound	Epoxy Resin	85954-11-6		3.253	mg	75009	40663
				supplier	mold compound	Phenol Resin	26834-02-6		2.168	mg	49991	27100
				supplier	mold compound	Carbon black	1333-86-4		0.217	mg	5004	2713
supplier	mold compound	Bismuth compound	7440-69-9		0.174	mg	4012	2175				