



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Sectionals *</b>	A-D  * : Required Field

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-05-07
<b>Contact Name *</b>	Refer to Supplier Comment section		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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<b>Legal Statement</b>			
<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
	MVBB*VB64ADJ	A	CA2A	2018-05-07
Amount	UoM	Unit type	ST ECOPACK Grade	
1.194	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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	1x1x0.38	4	No lead	
Comment	A0TH VDFPN 1.0X1.0X0.38 4L PITCH 0,6; MDF valid for LDLN025PU28R			

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	MVB8*VB64ADJ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other Inorganic materials	0.113	mg	supplier	die	Silicon (Si)	7440-21-3		0.101	mg	893805	84590
				supplier	metallization	Aluminium (Al)	7429-90-5		0.003	mg	26549	2513
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	17699	1675
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	8850	838
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	53097	5025
Leadframe	Copper & its alloys	0.584	mg	supplier	alloy	Copper (Cu)	7440-50-8		0.565	mg	967466	473199
				supplier	alloy	Iron (Fe)	7439-89-6		0.013	mg	22260	10888
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.001	mg	1712	838
				supplier	alloy	Zinc (Zn)	7440-66-6		0.001	mg	1712	838
				supplier	metallization	Nickel (Ni)	7440-02-0		0.004	mg	6849	3350
Die attach	Other Organic Materials	0.036	mg	supplier	tape	amorphous silica	7631-86-9		0.024	mg	666667	20101
				supplier	tape	epoxy resin	25068-38-6		0.004	mg	111111	3350
				supplier	tape	Cycloaliphatic Epoxy Resin	244772-00-7		0.004	mg	111111	3350
				supplier	tape	Phenol resin	9003-35-4		0.004	mg	111111	3350
				supplier	wire	Gold (Au)	7440-57-5		0.023	mg	1000000	19263
Encapsulation	Other Organic Materials	0.438	mg	supplier	mold compound	silica vitreous	60676-86-0		0.383	mg	874429	320771
				supplier	mold compound	Phenolic resin	205830-20-2		0.019	mg	43379	15913
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.018	mg	41096	15075
				supplier	mold compound	Epoxy resin	Proprietary		0.013	mg	29680	10888
				supplier	mold compound	carbon black	1333-86-4		0.001	mg	2283	838
				supplier	mold compound	other	Proprietary		0.004	mg	9132	3350