



## Materials Declaration Form


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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>18-01-2019</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<b>MDG MD CHAMPION</b>	<b>Representative Title</b>	<b>MDG MD CHAMPION</b>
<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>	<b>true</b>
<b>Legal Declaration *</b>	<b>Standard</b>
<b>Legal Statement</b>	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32WB55R6V6	P0GB*495XXXY	A	9996	18-01-2019
	Amount	UoM	Unit type	ST ECOPACK Grade
	186.00	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; if coating is used or other bulk termination	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	8x8x1.0	122	No lead	
Comment	Package : B029 VFQFPN 8X8X1.0 68L PITCH 0.4 DM00319327			

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	POGB*495XXXY				7000000.0	999998.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	12.018	mg	supplier	die	Silicon (Si)	7440-21-3		11.357	mg	944999	61059
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	2663	172
				supplier	metallization	Copper (Cu)	7440-50-8		0.280	mg	23298	1505
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	83	5
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.091	mg	7572	489
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	250	16
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	166	11
				supplier	Passivation	Silicon Nitride	12033-89-5		0.071	mg	5908	382
LEADFRAME (C194)	Copper and its alloy	100.933	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	15061	973
				supplier	ALLOY	Iron (Fe)	7439-89-6		2.372	mg	23500	12752
				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.030	mg	300	163
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.121	mg	1200	651
LEADFRAME Plating (Ag)	M-011 Other inorganic materials	1.496	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		98.410	mg	975000	529084
				supplier	COATING	Silver (Ag)	7440-22-4		1.496	mg	1000000	8044
DIE ATTACH (AMK-06)	M-011 Other inorganic materials	1.984	mg	supplier	GLUE	Silver	7440-22-4		1.547	mg	780000	8320
				supplier	GLUE	Carbocyclic acrylate	Proprietary		0.198	mg	100000	1067
				supplier	GLUE	Bismaleimide resin	13676-54-5		0.198	mg	100000	1067
				supplier	GLUE	Acrylate	Proprietary		0.020	mg	10000	107
BONDING WIRE	M-011 Other inorganic materials	0.015	mg	supplier	GLUE	2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3		0.020	mg	10000	107
				supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.015	mg	989900	82
ENCAPSULATION (EME G700Y)	M-011 Other inorganic materials	57.787	mg	supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.000	mg	10100	1
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		4.886	mg	70715	26271
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		1.745	mg	25255	9382
				supplier	MOLDING COMPOUND	Silica (Amorphous) A	60676-86-0		49.554	mg	717141	266419
				supplier	MOLDING COMPOUND	Silica (Amorphous) B	7631-86-0		12.565	mg	181838	67553
FINISHING PLATING (Sn)	M-011 Other inorganic materials	0.454	mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.349	mg	5051	1876
				supplier	COATING	Tin (Sn)	7440-02-0		0.454	mg	1000000	2440