



Materials Declaration Form


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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	23-07-2019
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement	
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Legal Statement	
Supplier Acceptance *	true
Legal Declaration *	Standard
Legal Statement	<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
STM32F103VBI6 STM32F103VBI6TR	Y0MJ*410YYY1	A	9993	23-07-2019
	Amount	UoM	Unit type	ST ECOPACK Grade
	63.91	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	
NAC	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	7x7x0.6	100	No lead	
Comment	Package : A0C2 UFBGA 7x7x0.60 100L R12sq P0.5 8219030			

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 2019				
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	YOMJ*410YYY1				5000001.0	999984.0
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	3.045	mg	supplier	die	Silicon (Si)	7440-21-3		2.618	mg	859770	40964
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	9524	454
				supplier	metallization	Copper (Cu)	7440-50-8		0.145	mg	47619	2269
				supplier	metallization	Cobalt (Co)	7440-48-4		0.027	mg	8867	422
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	2627	125
				supplier	metallization	Tungsten (W)	7440-33-7		0.016	mg	5255	250
				supplier	Passivation	Silicon Nitride	12033-89-5		0.019	mg	6240	297
				supplier	Passivation	Silicon Oxide	7631-86-9		0.183	mg	60099	2863
				supplier	Mold compound	Silica, vitreous [Fused Silica]	60676-86-0		32.159	mg	884096	503192
				supplier	Mold compound	Epoxy resins	Trade Secret		1.466	mg	40302	22939
Mold compound		36.375	mg	supplier	Mold compound	Phenolic resins	Trade Secret		1.100	mg	30241	17212
				supplier	Mold compound	Carbon black	1333-86-4		0.183	mg	5031	2863
				supplier	Mold compound	Metal Hydroxide	Trade Secret		1.100	mg	30241	17212
				supplier	Mold compound	Other miscellaneous substances	Trade Secret		0.367	mg	10089	5742
				supplier	Core	organic resin	Trade Secret		1.714	mg	87722	26819
				supplier	Core	Silicon dioxide	7631-86-9		0.969	mg	49593	15162
Substrate		19.539	mg	supplier	Core	Other inorganic filler	Trade Secret		0.969	mg	49593	15162
				supplier	Core	Glass fiber	65997-17-3		3.800	mg	194483	59459
				supplier	Solder mask	Organic resin	Trade Secret		1.970	mg	100824	30825
				supplier	Solder mask	Inorganic filler	Trade Secret		1.061	mg	54302	16601
				supplier	Cu Coil	Copper	7440-50-8		5.594	mg	286299	87529
				supplier	Ni Plating	Nickel	7440-02-0		3.007	mg	153897	47051
				supplier	Ni Plating	Gold	7440-57-5		0.455	mg	23287	7119
				supplier	Gold wire	Gold	7440-57-5		1.112	mg	1000000	17399
Wire		1.112	mg	supplier	Solder	Tin	7440-31-5		3.704	mg	965086	57957
Solderball		3.838	mg	supplier	Solder	Silver	7440-22-4		0.134	mg	34914	2097