



## 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

*\* : Required Field*

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	13-12-2017
<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>	MDG MD CHAMPION	<b>Representative Title</b>	MDG 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>		

<b>Uncertainty Statement</b>	
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<b>Legal Statement</b>	
<b>Supplier Acceptance *</b>	true
	<b>Legal Declaration *</b>
	Standard
<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
STM32F429NIH6J	P8RM*419XXB	a	9996	13-12-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	262.52	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	
Tin/Silver/Copper (SAC105)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	13x13x1.2	216	No lead	
Comment	Package : A0L2 TFBGA 13X13X1.2 216L P 0.8 MM 8373526			

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-12th January 2017				
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 :						Mfr Item Name	P8RM*419XXXB				10000000.0	0.0
note : Substance present with less 0.001mg will not be declared in this document												
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	15.105	mg	supplier	die	Silicon (Si)	7440-21-3		13.925	mg	921880	53044
				supplier	metallization	Aluminium (Al)	7429-90-5		0.082	mg	5429	312
				supplier	metallization	Copper (Cu)	7440-50-8		0.536	mg	35485	2042
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	132	8
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.075	mg	4965	286
				supplier	metallization	Tungsten (W)	7440-33-7		0.241	mg	15955	918
				supplier	Passivation	Silicon Nitride	12033-89-5		0.063	mg	4171	240
				supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	11983	689
SUBSTRATE (DS-7409HGB) Core	M-011 Other inorganic materials	69.300	mg	supplier	CORE	Organic resin	Proprietary		15.939	mg	230000	60715
				supplier	CORE	Other inorganic filler	Proprietary		18.018	mg	260000	68635
				supplier	CORE	Glass fiber	65997-17-3		35.343	mg	510000	134630
SUBSTRATE (DS-7409HGB) Solder Mask	M-011 Other inorganic materials	16.900	mg	supplier	SOLDERMASK	Organic resin	Proprietary		10.985	mg	650000	41844
				supplier	SOLDERMASK	Inorganic filler	Proprietary		5.915	mg	350000	22532
SUBSTRATE (DS-7409HGB) Cu Foil	M-011 Other inorganic materials	19.500	mg	supplier	CU FOIL	Copper (Cu)	7440-50-8		19.500	mg	1000000	74280
SUBSTRATE (DS-7409HGB) Ni Plating	M-011 Other inorganic materials	5.700	mg	supplier	NI PLATING	Nickel (Ni)	7440-02-0		5.700	mg	1000000	21713
SUBSTRATE (DS-7409HGB) Au Plating	M-011 Other inorganic materials	1.000	mg	supplier	AU PLATING	Gold (Au)	7440-57-5		1.000	mg	1000000	3809
DIE ATTACH (2300)	M-011 Other inorganic materials	1.699	mg	supplier	GLUE	Epoxy resin	Proprietary		0.374	mg	219999	1424
				supplier	GLUE	Filler (Ag)	7440-22-4		1.325	mg	780001	5048
BONDING WIRE (MKE Au HP )	M-011 Other inorganic materials	4.228	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		4.228	mg	1000000	16106
SOLDERBALL (Sn0.985Ag0.01Cu0.005)	M-011 Other inorganic materials	35.598	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		35.064	mg	984999	133567
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.356	mg	10001	1356
				supplier	SOLDERBALL	Copper (Cu)	7440-50-8		0.178	mg	5000	678
ENCAPSULATION (GE-100LFCS)	M-011 Other inorganic materials	93.490	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		11.191	mg	119597	42629
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		82.299	mg	880403	-686505