



## 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>
<b>* : Required Field</b>			

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>14-02-2018</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
STM32F105RCT7	P55W*418XXZ	A	9998	14-02-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	349.70	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	
LQFP	x:10,Y:10,Z:1.4mm	64		
Comment	Package : 5W LQFP 64 10x10x1.4 1 0051434			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P55W*418XXXZ				7000000.0	0.0
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	17.271	mg	supplier	die	Silicon (Si)	7440-21-3		16.566	mg	959180	47372
				supplier	metallization	Aluminium (Al)	7429-90-5		0.048	mg	2779	137
				supplier	metallization	Copper (Cu)	7440-50-8		0.239	mg	13838	683
				supplier	metallization	Cobalt (Co)	7440-48-4		0.045	mg	2606	129
				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	753	37
				supplier	metallization	Tungsten (W)	7440-33-7		0.026	mg	1505	74
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	1795	89
				supplier	Passivation	Silicon Oxide	7631-86-9		0.303	mg	17544	866
LEADFRAME (MHT- C194)	Copper and its alloy	84.412	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		82.301	mg	975000	235348
				supplier	ALLOY	Iron (Fe)	7439-89-6		1.984	mg	23500	5672
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.101	mg	1200	290
				supplier	ALLOY	Metallic Phosphorus (P)	7723-14-0		0.025	mg	300	72
LEADFRAME (MHT - Ag Plating)	M-011 Other inorganic materials	1.400	mg	supplier	COATING	Silver(Ag)	7440-22-4		1.400	mg	1000000	4004
DIE ATTACH (Evertech - AP4200)	M-011 Other inorganic materials	3.093	mg	supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-36-5		0.495	mg	160000	1415
				supplier	GLUE	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.046	mg	15000	133
				supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-35-4		0.046	mg	15000	133
				supplier	GLUE	2-butoxyethyl acetate	112-07-2		0.124	mg	40000	354
BONDING WIRE (Hesung - Au HTS)	M-011 Other inorganic materials	0.970	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.961	mg	990050	2747
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.010	mg	9900	27
				supplier	BONDING WIRE	Calcium (Ca)	7440-70-2		0.000	mg	50	0
ENCAPSULATION (Sumitomo - G631H)	M-011 Other inorganic materials	239.062	mg	supplier	MOLDING COMPOUND	Epoxy Resin A	Trade Secret		4.777	mg	20000	13659
				supplier	MOLDING COMPOUND	Epoxy Resin B	85954-11-6		9.553	mg	40000	27319
				supplier	MOLDING COMPOUND	Silica Amorphous A	60676-86-0		187.713	mg	785000	-463217
				supplier	MOLDING COMPOUND	Silica Amorphous B	7631-86-9		20.301	mg	85000	58052
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		1.194	mg	5000	3415
FINISHING (Sytron - Pure Tin)	M-011 Other inorganic materials	3.492	mg	supplier	MOLDING COMPOUND	Phenol Resin	Trade Secret		15.524	mg	65000	44393
				supplier	COATING	Tin (Sn)	7440-31-5		3.492	mg	1000000	9987