



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 *	2017-04-10
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	
	<p>While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.</p>
Legal Statement	
Supplier Acceptance *	<div style="display: flex; justify-content: space-between;"> true Legal Declaration * Standard </div>
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
STM32F429BET6	46UH*419XXX3	A	9998	2017-04-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	2542.17	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	
QFP	28x28x1.4	208	L Bend	
Comment	Package : UH LQFP 208 28x28x1.4 1.0 7147657			

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- 7th July 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	46UH*419XXX3				7000001.0	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	18.364	mg	supplier	die	Silicon (Si)	7440-21-3		17.184	mg	935744	6760
				supplier	metallization	Aluminium (Al)	7429-90-5		0.082	mg	4465	32
				supplier	metallization	Copper (Cu)	7440-50-8		0.536	mg	29188	211
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	109	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.075	mg	4084	30
				supplier	metallization	Tungsten (W)	7440-33-7		0.241	mg	13124	95
				supplier	Passivation	Silicon Nitride	12033-89-5		0.063	mg	3431	25
LEADFRAME (LGIC- C194)	M-011 Other inorganic materials	471.813	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	9856	71
				supplier	ALLOY	Copper (Cu)	7440-50-8		459.783	mg	974502	180862
				supplier	ALLOY	Iron (Fe)	7439-89-6		11.323	mg	23999	4454
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.566	mg	1199	223
				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.141	mg	299	56
LEADFRAME (LGIC- Ag)	M-011 Other inorganic materials	2.250	mg	supplier	COATING	Silver(Ag)	7440-22-4		2.250	mg	1000000	885
DIE ATTACH (Evertech -AP4200)	M-011 Other inorganic materials	2.842	mg	supplier	GLUE	Epoxy	9003-36-5		0.625	mg	219916	246
				supplier	GLUE	Silver(Ag)	7440-22-4		2.217	mg	780084	872
BONDING WIRE (Heraeus - HTS Au w/)	M-011 Other inorganic materials	5.737	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		5.679	mg	989890	2234
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.058	mg	10110	23
ENCAPSULATION (Sumitomo -G631H)	M-011 Other inorganic materials	2029.814	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		206.951	mg	102068	81407
				supplier	MOLDING COMPOUND	Silica fused (SiO3)	60676-86-0		1698.692	mg	836692	-331797
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		113.823	mg	56137	44774
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		10.348	mg	5104	4071
FINISHING- (ST380 -Sn)	M-011 Other inorganic materials	11.350	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		11.350	mg	1000000	4465