



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 *	30-08-2017
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
STM32F410CBT6	B05B*458HHHA	A	998Z	30-08-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	195.16	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	7X7X1.4	48	L bend	
Comment	Package : 5B LQFP 48 7x7x1.4 1 0110596			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	B05B*458HHHA				6000000.0	1000000.0
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	6.224	mg	supplier	die	Silicon (Si)	7440-21-3		5.911	mg	949711	30288
				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	3535	113
				supplier	metallization	Copper (Cu)	7440-50-8		0.142	mg	22815	728
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.020	mg	3213	102
				supplier	metallization	Tungsten (W)	7440-33-7		0.064	mg	10283	328
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	2731	87
				supplier	Passivation	Silicon Oxide	7631-86-9		0.048	mg	7712	246
Die Attach Epoxy_ABLEBOND 3230_H	M-011 Other inorganic materials	0.804	mg	Supplier	Metals	Silver	7440-22-4		0.725	mg	901000	3713
				Supplier	Plastics/polymers	Highly cross-linked polymer	Proprietary		0.080	mg	99000	408
Mold Compound_EME-G700E_Sumit	M-011 Other inorganic materials	118.827	mg	Supplier	Plastics/polymers	Epoxy Resin	Proprietary		5.957	mg	50000	31477
				Supplier	Plastics/polymers	Phenol Resin	Proprietary		5.957	mg	50000	31477
				Supplier	Plastics/polymers	Silica(Amorphous)A	60676-86-0		92.669	mg	780450	459559
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		13.501	mg	113320	71339
				Supplier	Additives	Carbon Black	1333-86-4		0.742	mg	6230	3922
Wire_Au HA3_HERAUEUS	Bonding Wire	0.907	mg	Supplier	Metals	Gold	7440-57-5		0.907	mg	1000000	4791
Plating anode_Pure Tin_Nuo Nengda	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin	7440-31-5		1.078	mg	1000000	5698
Leadframe_C9+Ag_MITSUI	Copper & its alloys	67.321	mg	Supplier	Metals	Copper	7440-50-8		64.742	mg	961700	342100
				Supplier	Metals	Iron	7439-89-6		1.528	mg	22700	8075
				Supplier	Metals	Zinc	7440-66-6		0.101	mg	1500	534
				Supplier	Non-metals	Phosphorus	7723-14-0		0.020	mg	300	107