



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-08-21
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Patrick Crudo	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 688 339	Representative Email *	patrick.crudo@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F102CBT6	GB5B*410XXX	A	9988	2017-08-21
Amount	UoM	Unit type	ST ECOPACK Grade	
329,00	mg	Each	ECOPACK® 2	

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	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
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-12th January 2017				
Query				Response
The product 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	GB58*410XXXX					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	M-011 Other inorganic materials	8,091	mg	supplier	die	Silicon (Si)	7440-21-3		7,831	mg	967866	23802
				supplier	metallization	Aluminium (Al)	7429-90-5		0,023	mg	2843	70
				supplier	metallization	Copper (Cu)	7440-50-8		0,023	mg	2843	70
				supplier	metallization	Titanium (Ti)	7440-32-6		0,047	mg	5809	143
				supplier	metallization	Tungsten (W)	7440-33-7		0,009	mg	1112	27
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,015	mg	1854	46
Die Attach Epoxy	M-011 Other inorganic materials	0,689	mg	supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0,143	mg	17674	435
				supplier	Glue	Epoxy Resin A	Proprietary (TS ref#)		0,051	mg	74020	155
				supplier	Glue	Anhydride	Proprietary (TS ref#)		0,051	mg	74020	155
				supplier	Glue	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0,020	mg	29028	61
				supplier	Glue	Epoxy resin B	Proprietary (TS ref#)		0,020	mg	29028	61
				supplier	Glue	Epoxy resin modifier	Proprietary (TS ref#)		0,020	mg	29028	61
Bonding Wire	M-011 Other inorganic materials	0,606	mg	supplier	Bonding Wire	Gold	7440-57-5		0,606	mg	1000000	1842
				supplier	Alloy	Copper	7440-50-8		230,381	mg	951877	700246
				supplier	Alloy	Iron	7223-14-0		5,524	mg	22824	16790
Lead Frame	M-011 Other inorganic materials	242,028	mg	supplier	Alloy	Phosphorus	7723-14-0		0,061	mg	252	185
				supplier	Alloy	Zinc	7440-66-6		0,305	mg	1260	927
				supplier	Alloy	Silver	7440-22-4		5,757	mg	23787	17498
				supplier	Molding compound	Silica Fused	60676-86-0		63,748	mg	863490	193763
Encapsulation	M-011 Other inorganic materials	73,826	mg	supplier	Molding compound	Epoxy Resin	Proprietary		5,905	mg	79985	17948
				supplier	Molding compound	Phenol Resin	Proprietary		3,937	mg	53328	11967
				supplier	Molding compound	Carbon Black	1333-86-4		0,236	mg	3197	717
Finishing	M-011 Other inorganic materials	1,765	mg	supplier	Connection coating	Tin	7440-31-5		1,765	mg	1000000	5365