



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
STM32F102C8T6 STM32F102C8T6TR	M85B*410XXX2	A	959	2017-08-21
Amount	UoM	Unit type	ST ECOPACK Grade	
180,00	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	NiPdAu	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	M858*410XXX2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die	M-011 Other inorganic materials	10,190	mg	supplier	die	Silicon (Si)	7440-21-3		9,858	mg	967419	54767
				supplier	metallization	Aluminium (Al)	7429-90-5		0,029	mg	2846	161
				supplier	metallization	Copper (Cu)	7440-50-8		0,029	mg	2846	161
				supplier	metallization	Titanium (Ti)	7440-32-6		0,060	mg	5888	333
				supplier	metallization	Tungsten (W)	7440-33-7		0,012	mg	1178	67
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,019	mg	1865	106
Lead-frame	M-011 Other inorganic materials	75,592	mg	supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0,183	mg	17959	1017
				supplier	alloy	Copper (Cu)	7440-50-8		72,936	mg	964855	405199
				supplier	alloy	Nickel (Ni)	7440-02-0		2,097	mg	27746	11652
				supplier	alloy	Silicium (Si)	7440-21-3		0,454	mg	6012	2525
Lead-frame Coating	M-011 Other inorganic materials	0,403	mg	supplier	alloy	Magnesium (Mg)	7439-95-4		0,105	mg	1387	583
				supplier	coating	Nickel (Ni)	7440-02-0		0,369	mg	914840	2048
				supplier	coating	Palladium (Pd)	7440-05-3		0,012	mg	29660	66
Die Attach	M-011 Other inorganic materials	1,954	mg	supplier	coating	Gold (Au)	7440-57-5		0,011	mg	27750	62
				supplier	coating	Silver (Ag)	7440-22-4		0,011	mg	27750	62
				supplier	glue or soft solder	Silver (Ag)	7440-22-4		1,505	mg	770000	8359
				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0,442	mg	226000	2454
Wires	M-011 Other inorganic materials	0,538	mg	supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobutyl	6846-50-0		0,008	mg	4000	43
				supplier	Bonding wire	Silver (Ag)	7440-22-4		0,519	mg	965000	2884
				supplier	Bonding wire	Gold (Au)	7440-57-5		0,003	mg	5000	15
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0,016	mg	30000	90
Encapsulation	M-011 Other inorganic materials	91,960	mg	supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		6,786	mg	73794	37700
				supplier	Moulding Compound	Phenol Resin	Proprietary		4,847	mg	52710	26929
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		79,551	mg	865062	441950
				supplier	Moulding Compound	Carbon-black	1333-86-4		0,485	mg	5271	2693
				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0,145	mg	1581	808
Finishing	M-011 Other inorganic materials	0,003	mg	supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0,145	mg	1581	808
				supplier	connections coating	Nickel (Ni)	7440-02-0		0,002	mg	914840	13
				supplier	connections coating	Palladium (Pd)	7440-05-3		0,000	mg	29660	0
				supplier	connections coating	Gold (Au)	7440-57-5		0,000	mg	27750	0
				supplier	connections coating	Silver (Ag)	7440-22-4		0,000	mg	27750	0