



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 *	2017-07-11
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 *
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
STM32F303RDT6	B45W*446XXY	A	9988	2017-07-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	389.00	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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	64	L Bend	
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 :						Mfr Item Name	B45W*446XXY				5000001.0	999994.0
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	20.573	mg	supplier	die	Silicon (Si)	7440-21-3		19.821	mg	963447	50954
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2479	131
				supplier	metallization	Copper (Cu)	7440-50-8		0.255	mg	12395	656
				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2333	123
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	681	36
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1361	72
				supplier	Passivation	Silicon Nitride	12033-89-5		0.033	mg	1604	85
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	15700	830
				Supplier	Mold compound	Epoxy Resin	Proprietary		18.202	mg	76404	46792
Encapsulation	M-011 Other inorganic materials	238.235	mg	Supplier	Mold compound	Phenol Resin	Proprietary		12.135	mg	50937	31195
				Supplier	Mold compound	Carbon Black	1333-86-4		0.728	mg	3056	1871
				Supplier	Mold compound	Silica Fused	60676-86-0		207.170	mg	869603	532570
				Supplier	Wire	Gold	7440-57-5		0.670	mg	1000000	1722
Bondig wire	M-011 Other inorganic materials	0.670	mg	Supplier	Wire	Gold	7440-57-5		0.670	mg	1000000	1722
Finishing	M-011 Other inorganic materials	1.439	mg	Supplier	Connection coating	Tin	7440-31-5		1.439	mg	1000000	3699
				Supplier	Alloy	Copper	7440-50-8		121.887	mg	951632	313334
Leadframe	M-011 Other inorganic materials	128.082	mg	Supplier	Alloy	Iron	12597-68-1		2.939	mg	22946	7555
				JIG-R	Alloy	Lead	7439-92-1		0.000	mg	1	0
				Supplier	Alloy	Phosphorus	7723-14-0		0.032	mg	250	82
				Supplier	Alloy	Zinc	7440-66-6		0.162	mg	1265	416
				Supplier	Alloy	Silver	7440-22-4		3.062	mg	23907	7871