



## Materials Declaration Form

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

Supplier Information			
Company Name *	<b>STMicroelectronics</b>	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 *	<b>MDG MD CHAMPION</b>	Representative Title	<b>MDG MD CHAMPION</b>
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

### Uncertainty Statement

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### Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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### 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
STM32F373V8T6	P31L*432XXXB	A	9998	2017-07-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	681.44	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	100	L Bend	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P31L*432XXB				6000001.0	0.0
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	15.006	mg	supplier	die	Silicon (Si)	7440-21-3		14.392	mg	959083	21120
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	2799	62
				supplier	metallization	Copper (Cu)	7440-50-8		0.208	mg	13861	305
				supplier	metallization	Cobalt (Co)	7440-48-4		0.039	mg	2599	57
				supplier	metallization	Titanium (Ti)	7440-32-6		0.012	mg	800	18
				supplier	metallization	Tungsten (W)	7440-33-7		0.023	mg	1533	34
				supplier	Passivation	Silicon Nitride	12033-89-5		0.027	mg	1799	40
				supplier	Passivation	Silicon Oxide	7631-86-9		0.263	mg	17526	386
				supplier	ALLOY	Copper (Cu)	7440-50-8		147.008	mg	945839	215731
				supplier	ALLOY	Iron (Fe)	7439-89-6		3.621	mg	23297	5314
LEADFRAME	M-011 Other inorganic materials	155.426	mg	supplier	ALLOY	Phosphorous (P)	7723-14-0		0.045	mg	290	66
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.181	mg	1165	266
				supplier	COATING	Nickel (Ni)	7440-02-0		4.431	mg	28509	6502
				supplier	COATING	Palladium (Pd)	7440-05-3		0.094	mg	605	138
				supplier	COATING	Gold (Au)	7440-57-5		0.046	mg	296	68
				supplier	COATING	Silver (Ag)	7440-22-4		2.033	mg	700069	2983
DIE ATTACH	M-011 Other inorganic materials	2.904	mg	supplier	GLUE	Silica	Proprietary		0.436	mg	150138	640
				supplier	GLUE	Epoxy resin A	9003-36-5		0.087	mg	29959	128
				supplier	GLUE	Epoxy resin B	Proprietary		0.145	mg	49931	213
				supplier	GLUE	Diluent	Proprietary		0.145	mg	49931	213
				supplier	GLUE	Hardener	Proprietary		0.058	mg	19972	85
BONDING WIRE	M-011 Other inorganic materials	1.534	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.533	mg	999348	2250
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.001	mg	652	1
ENCAPSULATION	M-011 Other inorganic materials	505.811	mg	supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		49.860	mg	100637	73169
				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		426.035	mg	838981	-374803
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		27.423	mg	55350	40243
FINISHING	M-011 Other inorganic materials	0.759	mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		2.493	mg	5032	3658
				supplier	COATING	Nickel (Ni)	7440-02-0		0.739	mg	973650	1084
				supplier	COATING	Palladium (Pd)	7440-05-3		0.016	mg	21080	23
				supplier	COATING	Gold (Au)	7440-57-5		0.004	mg	5270	6