



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 *	2016-11-30
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
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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
STM32L151VET6	P31L*437XXXZ	A	9998	2016-11-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	681.44	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	
Not Applicable ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

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

QueryList : ROHS directive 2011/65/EU _ July 2011	
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-20th June 2016				
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	P31L*437XXXZ					
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)	Other inorganic materials	19.090	mg	supplier	die	Silicon (Si)	7440-21-3		18.508	mg	969513	27160
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2672	75
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.171	mg	8958	251
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.014	mg	733	21
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.025	mg	1310	37
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	52	1
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.045	mg	2357	66
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.275	mg	14405	404
LEADFRAME	Other inorganic materials	132.746	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		127.215	mg	958334	186686
LEADFRAME				supplier	ALLOY	Chromium (Cr)	7440-47-3		0.385	mg	2900	565
LEADFRAME				supplier	ALLOY	Tin (Sn)	7440-31-5		0.320	mg	2411	470
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.256	mg	1928	376
LEADFRAME				supplier	COATING	Nickel (Ni)	7440-02-0		4.431	mg	33380	6502
LEADFRAME				supplier	COATING	Palladium (Pd)	7440-05-3		0.094	mg	708	138
LEADFRAME				supplier	COATING	Gold (Au)	7440-57-5		0.045	mg	339	66
DIE ATTACH	Other inorganic materials	1.878	mg	supplier	GLUE	Silver(Ag)	7440-22-4		1.315	mg	700213	1930
DIE ATTACH				supplier	GLUE	Epoxy resin A	9003-36-5		0.047	mg	25027	69
DIE ATTACH				supplier	GLUE	Epoxy resin B	Trade secret		0.094	mg	50053	138
DIE ATTACH				supplier	GLUE	Allyl compound	Trade secret		0.150	mg	79872	220
DIE ATTACH				supplier	GLUE	Silica	Trade secret		0.141	mg	75080	207
DIE ATTACH				supplier	GLUE	Diluent	Trade secret		0.131	mg	69755	192
BONDING WIRE	Other inorganic materials	1.534	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.519	mg	990222	2229
BONDING WIRE				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.015	mg	9778	22
ENCAPSULATION	Other inorganic materials	525.433	mg	supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		53.599	mg	102009	78655
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica (SiO3)	60676-86-0		439.675	mg	836786	645215
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		2.680	mg	5101	3933
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	Trade secret		29.479	mg	56104	43260
FINISHING	Other inorganic materials	0.759	mg	supplier	CONNECTION COATING	Nickel (Ni)	7440-02-0		0.739	mg	973650	1084
FINISHING				supplier	CONNECTION COATING	Palladium (Pd)	7440-05-3		0.016	mg	21080	23
FINISHING				supplier	CONNECTION COATING	Gold (Au)	7440-57-5		0.004	mg	5270	6