



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-02-23
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	LAURENT TOSI	<b>Representative Title</b>	MDG MD CHAMPION
<b>Representative Phone *</b>	33 442 685 795	<b>Representative Email *</b>	<a href="mailto:laurent.tosi@st.com">laurent.tosi@st.com</a>
<b>Supplier Comment</b>	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			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
STM32L4A6VGT6	P11L*461XXXB	A	9998	2017-02-23
	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 : 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: 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 :						Mfr Item Name	P11L*461XXB					
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	Other inorganic materials	17.642	mg	supplier	die	Silicon (Si)	7440-21-3		16.984	mg	962703	24924
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	1814	47
				supplier	metallization	Copper (Cu)	7440-50-8		0.279	mg	15815	409
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	57	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.090	mg	5101	132
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	170	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	113	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.071	mg	4024	104
LEADFRAME (Shinko - C194)	Other inorganic materials	146.189	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.180	mg	10203	264
				supplier	ALLOY	Copper (Cu)	7440-50-8		142.461	mg	974500	209059
				supplier	ALLOY	Iron (Fe)	7439-89-6		3.509	mg	24000	5149
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.175	mg	1200	257
LEADFRAME (Shinko - RTPPF Plating)	Other inorganic materials	4.542	mg	supplier	ALLOY	Metallic Phosphorous (P)	7723-14-0		0.044	mg	300	64
				supplier	COATING	Nickel (Ni)	7440-02-0		4.431	mg	975400	6502
				supplier	COATING	Palladium (Pd)	7440-05-3		0.094	mg	20700	138
DIE ATTACH (Sumitomo - 1076YB)	Other inorganic materials	2.401	mg	supplier	COATING	Gold (Au)	7440-57-5		0.018	mg	3900	26
				supplier	GLUE	Silver(Ag)	7440-22-4		1.681	mg	700000	2467
				supplier	GLUE	Epoxy Resin A	9003-36-5		0.120	mg	50000	176
				supplier	GLUE	Silica fused	7631-86-9		0.240	mg	100000	352
				supplier	GLUE	Dicyandiamide	461-58-5		0.012	mg	5000	18
				supplier	GLUE	Diluent	3101-60-8		0.120	mg	50000	176
				supplier	GLUE	Allyl Compound	Proprietary		0.120	mg	50000	176
BONDING WIRE (MKE - Au HTS Wire)	Other inorganic materials	1.534	mg	supplier	GLUE	Hardener	Proprietary		0.108	mg	45000	159
				supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.519	mg	990060	2229
				supplier	BONDING WIRE	Calcium (Ca)	7440-70-2		0.000	mg	40	0
ENCAPSULATION (Sumitomo -G631H)	Other inorganic materials	508.636	mg	supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.015	mg	9900	22
				supplier	MOLDING COMPOUND	Epoxy Resin A	Proprietary		15.279	mg	30039	22421
				supplier	MOLDING COMPOUND	Epoxy resin B	85954-11-6		35.651	mg	70091	52317
				supplier	MOLDING COMPOUND	Silica fused (SiO3)	60676-86-0		427.149	mg	839793	626833
FINISHING (Shinko - RTPPF)	Other inorganic materials	0.495	mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		2.546	mg	5006	3737
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		28.011	mg	55071	41106
				supplier	COATING	Nickel (Ni)	7440-02-0		0.437	mg	882600	641
				supplier	COATING	Palladium (Pd)	7440-05-3		0.026	mg	52400	38
				supplier	COATING	Gold (Au)	7440-57-5		0.032	mg	65000	47