



## 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>	2015-12-21
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	LAURENT TOSI	<b>Representative Title</b>	MMS 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/online_tech_support.html">http://www.st.com/web/en/support/online_tech_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
STM32L476VCT6	451L*415XXX4	A	9998	2015-12-21
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	
NAC	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	
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-15th June 2015				
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	451L*415XXX4					
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	Other inorganic materials	16,506	mg	supplier	die	Silicon (Si)	7440-21-3		14,731	mg	892463	21617
Die or Dies				supplier	metallization	Aluminum (Al)	7429-90-5		0,027	mg	1636	40
Die or Dies				supplier	metallization	Copper (Cu)	7440-50-8		0,242	mg	14661	355
Die or Dies				supplier	metallization	Tantalum (Ta)	7440-25-7		1,283	mg	77729	1883
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0,001	mg	61	1
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0,003	mg	182	4
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0,002	mg	121	3
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,061	mg	3696	90
Die or Dies				supplier	passivation	Silicon Oxide (SiO2)	7631-86-9		0,156	mg	9451	229
LEADFRAME (Shinko - C194)	Other inorganic materials	221,883	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		216,225	mg	974500	317306
LEADFRAME (Shinko - C194)				supplier	ALLOY	Iron (Fe)	7439-89-6		5,325	mg	23999	7814
LEADFRAME (Shinko - C194)				supplier	ALLOY	Zinc (Zn)	7440-66-6		0,266	mg	1199	390
LEADFRAME (Shinko - C194)				supplier	ALLOY	Phosphorus (P)	7723-14-0		0,067	mg	302	98
LEADFRAME (Shinko - PPF)	Other inorganic materials	5,285	mg	supplier	COATING	Nickel (Ni)	7440-02-0		5,170	mg	978240	7587
LEADFRAME (Shinko - PPF)				supplier	COATING	Palladium (Pd)	7440-05-3		0,110	mg	20814	161
LEADFRAME (Shinko - PPF)				supplier	COATING	Gold (Au)	7440-57-5		0,005	mg	946	7
DIE ATTACH (Sumitomo - CRM-1076Y)	Other inorganic materials	0,007	mg	supplier	GLUE	Resin	Trade secret		0,002	mg	285714	3
DIE ATTACH (Sumitomo - CRM-1076Y)				supplier	GLUE	Silver (Ag)	7440-22-4		0,005	mg	714286	7
BONDING WIRE (MKE - HTS wire)	Other inorganic materials	1,342	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1,329	mg	990313	1950
BONDING WIRE (MKE - HTS wire)				supplier	BONDING WIRE	Palladium (Pd)	7440-41-7		0,013	mg	9687	19
ENCAPSULATION (Sumitomo -G631HC)	Other inorganic materials	436,417	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Trade secret		43,815	mg	100397	64298
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Silica fused (SiO3)	60676-86-0		366,313	mg	839365	537557
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Phenol Resin	Trade secret		24,098	mg	55218	35363
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		2,191	mg	5020	3215