



## 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>	2015-05-19
<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
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<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
STM32F401VEH6	YOMJ*433XXXA	A	9993	2013-12-12
Amount	UoM	Unit type	ST ECOPACK Grade	
64,01	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	
Tin/Silver/Copper (SAC305)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	7x7x0.60	100	NAC	
Comment	Package: UFBGA 7x7x0.60 100L R12sq P0.5			

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 2013				
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	YOMJ*433XXXA					
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	1,973	mg	supplier	die	Silicon (Si)	7440-21-3		1,641	mg	831728	25639
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0,015	mg	7603	234
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0,15	mg	76026	2344
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0,043	mg	21794	672
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0,002	mg	1014	31
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0,001	mg	507	16
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,034	mg	17233	531
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,087	mg	44095	1359
SUBSTRATE	Other inorganic materials	19,539	mg	supplier	Core	organic resin	na		1,7135	mg	87699	26771
SUBSTRATE				supplier	Core	Silicon dioxide	7631-86-9		0,969	mg	49594	15139
SUBSTRATE				supplier	Core	Other inorganic filler	na		0,969	mg	49594	15139
SUBSTRATE				supplier	Core	Glass fiber	65997-17-3		3,8	mg	194488	59370
SUBSTRATE				supplier	Solder mask	Organic resin	na		1,97	mg	100827	30779
SUBSTRATE				supplier	Solder mask	Inorganic filler	na		1,061	mg	54303	16577
SUBSTRATE				supplier	Cu Coil	Copper	7440-50-8		5,594	mg	286307	87399
SUBSTRATE				supplier	Ni Plating	Nickel	7440-02-0		3,007	mg	153901	46981
SUBSTRATE				supplier	Au Plating	Gold	7440-57-5		0,455	mg	23287	7109
Glue	Other inorganic materials	0,572	mg	supplier	Glue	Fumed silica, amorphous	67762-90-7		0,011	mg	19225	172
Glue				supplier	Glue	Dapsone ; 4,4'-Diaminodiphenylsulfone	80-08-0		0,029	mg	50683	453
Glue				supplier	Glue	Epikote 862	28064-14-4		0,057	mg	99619	891
Glue				supplier	Glue	Phenol, polymer with formaldehyde	9003-35-4		0,05717998	mg	99934	893
Glue				supplier	Glue	Other resins	Proprietary		0,418	mg	730539	6531
Mold compound	Other inorganic materials	38,220	mg	supplier	Encapsulation	Epoxy resins	Proprietary		1,542	mg	40345	24092
Mold compound				supplier	Encapsulation	Silica, Vitreous	60676-86-0		33,785	mg	883961	527849
Mold compound				supplier	Encapsulation	Phenol resin	Proprietary		1,157	mg	30272	18077
Mold compound				supplier	Encapsulation	Carbon Black	Proprietary		0,193	mg	5050	3015
Mold compound				supplier	Encapsulation	Other miscellaneous substances	Proprietary		0,386	mg	10099	6031
Mold compound				supplier	Encapsulation	Metal Hydroxide	Proprietary		1,157	mg	30272	18077
Wire	Other inorganic materials	0,600	mg	supplier	Wire	Gold	7440-57-5		0,594	mg	990000	9281
Wire				supplier	Wire	Palladium	7440-05-3		0,006	mg	10000	94
SOLDERBALL	Other inorganic materials	3,101	mg	supplier	Solder	Tin (Sn)	7440-31-5		2,992	mg	964850	46746
SOLDERBALL				supplier	Solder	Silver (Ag)	7440-22-4		0,109	mg	35150	1703