



## 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>	2014-04-16
<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
M93C46-WBN6P	PP8W*0C461GC	A	9998	2014-04-16
Amount		UoM	Unit type	ST ECOPACK Grade
480.00		mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
THO	JEDEC	8	Through-hole
Comment	Package: PDIP 08 .3 CU .25 Au W.		

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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-16th December 2013				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	PP8W*0C461GC					
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	0.531	mg	supplier	die	Silicon (Si)	7440-21-3		0.521	mg	981168	1085
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.001	mg	1883	2
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	1883	2
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1883	2
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.001	mg	1883	2
die (s)				supplier	passivation	Indium Tin oxide ( In2O3.SnO2 )	50926-11-9		0.006	mg	11299	13
LEADFRAME	Other inorganic materials	172.242	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		167.156	mg	970472	348242
LEADFRAME				supplier	ALLOY	Iron(Fe)	7439-89-6		4.118	mg	23908	8579
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.230	mg	1335	479
LEADFRAME				supplier	ALLOY	Phosphorus	7723-14-0		0.069	mg	401	144
LEADFRAME				supplier	COATING	Silver (Ag)	7440-22-4		0.669	mg	3884	1394
DIE ATTACH	Other inorganic materials	0.361	mg	supplier	GLUE	Epoxy resin	9003-36-5		0.043	mg	119114	90
DIE ATTACH				supplier	GLUE	Silver(Ag)	7440-22-4		0.268	mg	742382	558
DIE ATTACH				supplier	GLUE	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.025	mg	69252	52
DIE ATTACH				supplier	GLUE	2,2'-[[2-(oxiranylmethoxy)-1,3-phenylene]bis(methoxy)]	13561-08-5		0.025	mg	69252	52
BONDING WIRE	Other inorganic materials	0.185	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.183	mg	989189	381
BONDING WIRE				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.002	mg	10811	4
ENCAPSULATION	Other inorganic materials	297.517	mg	supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		34.172	mg	114857	71192
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		257.402	mg	865167	536254
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica fused (SiO2)	Trade secret		4.457	mg	14981	9285
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		1.486	mg	4995	3096
FINISHING	Other inorganic materials	9.164	mg	supplier	CONNECTION COATING	Tin (Sn)	7440-31-5		9.164	mg	1000000	19092