



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-12-22
<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>	Giovanni Giacobello	<b>Representative Title</b>	IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

<b>Legal Statement</b>			
<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
	8HZJ*TWUV68D	A	ZA41	2015-12-22
Amount	UoM	Unit type	ST ECOPACK Grade	
98.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOJ	3X3X0.9 1.7 16L	2	J bend	
Comment	Package: SMB CLIP (SOD 6 NEW); MDF valid for SM6T6V8A; SMBJ5.0A-TR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 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	8HZJ*TWUV68D						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Silicon die	Other inorganic materials	1.622	mg	supplier	die	Silicon (Si)	7440-21-3		1.572	mg	969174	16041	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	5549	92	
Silicon die				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	4316	71	
Silicon die				supplier	metallization	Gold (Au)	7440-57-5		0.007	mg	4316	71	
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.009	mg	5549	92	
Silicon die				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.006	mg	3699	61	
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1233	20	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.01	mg	6165	102	
Leadframe & clip	Copper & its alloys	39.18	mg	supplier	alloy	Copper (Cu)	7440-50-8		39.16	mg	999490	399592	
Leadframe & clip				supplier	alloy	Zinc (Zn)	7440-66-6		0.002	mg	51	20	
Leadframe & clip				supplier	alloy	Iron (Fe)	7439-89-6		0.004	mg	102	41	
Leadframe & clip				supplier	alloy	Phosphorus (P)	12185-10-3		0.014	mg	357	143	
Soft solder	Solder	3.498	mg	supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.236	mg	925100	33020	
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.175	mg	50029	1786	
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.087	mg	24871	888	
encapsulation	Other inorganic materials	51.964	mg	supplier	mold compound	silica fused	7631-86-9		38.453	mg	739993	392378	
encapsulation				supplier	Moulding Compound	silica quartz	14808-60-7		10.393	mg	200004	106051	
encapsulation			mg	supplier	Moulding Compound	phenolic resin	9003-35-4		2.598	mg	49996	26510	
encapsulation			mg	supplier	Moulding Compound	carbon black	1333-86-4		0.52	mg	10007	5306	
connections coating	Solder	1.736	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.736	mg	1000000	17714	