



## 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>	2015-07-24
<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 Giacopello	<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**


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<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
	HNZJ*Z24S81T	A	ZA41	2015-07-24
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 STPS140U			

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-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	HNZJ*Z24581T						
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	0.669	mg	supplier	die	Silicon (Si)	7440-21-3		0.639	mg	955157	6520	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	5979	41	
Silicon die				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	4484	31	
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1495	10	
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1495	10	
Silicon die				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	5979	41	
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1495	10	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	5979	41	
Silicon die				supplier	polymer die coating	Durimide	proprietary		0.012	mg	17937	122	
Leadframe & clip	Copper & its alloys	39.567	mg	supplier	alloy	Copper (Cu)	7440-50-8		39.547	mg	999495	403541	
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	101	41	
Leadframe & clip				supplier	alloy	Phosphorus (P)	12185-10-3		0.014	mg	354	143	
Soft solder	Solder	3.533	mg	supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.268	mg	924993	33347	
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.177	mg	50099	1806	
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.088	mg	24908	898	
encapsulation	Other inorganic materials	52.478	mg	supplier	mold compound	silica fused	7631-86-9		38.833	mg	739986	396255	
encapsulation				supplier	Moulding Compound	silica quartz	14808-60-7		10.496	mg	200008	107102	
encapsulation				supplier	Moulding Compound	phenolic resin	9003-35-4		2.624	mg	50002	26776	
encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		0.525	mg	10004	5357	
connections coating	Solder	1.753	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.753	mg	1000000	17888	