



## 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>	2016-04-22
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	ADG MD 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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STP100N8F6	T3DZ*7D8ETCF	A	Z8GA	2016-04-22
Amount		UoM	Unit type	ST ECOPACK Grade
1900.00		mg	Each	ECOPACK® 2

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	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10 - 9.05 - 4.4	3	gull wing	
Comment	Package: TO 220 AB NON ISOL			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - 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
1 - Product(s) 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	T3DZ*7D8ETCF					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	2.302	mg	supplier	die	Silicon (Si)	7440-21-3		2.099	mg	911816	1105
				supplier	metallization	Aluminium (Al)	7429-90-5		0.114	mg	49522	60
				supplier	Passivation	Silicon Oxide	7631-86-9		0.032	mg	13901	17
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	1303	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	17376	21
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.014	mg	6082	7
Leadframe	Copper & its alloys	1097.405	mg	supplier	alloy	Copper(CU)	7440-50-8		1095.704	mg	998450	576686
				supplier	alloy	Iron(Fe)	7439-89-6		1.097	mg	1000	577
				supplier	metallization	Phosphorus(P)	12185-10-3		0.329	mg	300	173
				supplier	metallization	Nickel	7440-02-0		0.275	mg	250	145
Soft solder	Solder	3.436	mg	supplier	Soft Solder	Tin(Sn)	7440-31-5		0.070	mg	20373	37
				supplier	Soft Solder	Silver(Ag)	7440-22-4		0.086	mg	25029	45
				JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.280	mg	954598	1726
Bonding wire	Other Organic Materials	4.222	mg	supplier	wire	Aluminum(Al)	84195-93-7		4.222	mg	1000000	2222
Encapsulation	Other Organic Materials	766.530	mg	supplier	Molding compound	Silica Fused	60676-86-0		613.223	mg	799999	322749
				supplier	Molding compound	Epoxy Resin	25068-38-6		76.654	mg	100001	40344
				supplier	Molding compound	Phenol Resin	29690-82-2		49.825	mg	65001	26224
				supplier	Molding compound	Carbon Black	14808-60-7		26.828	mg	34999	14120
Connections coating	Solder	26.105	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		26.105	mg	1000000	13739