



## 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>	2015-06-12
<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**


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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
	T3FP*OD64T5F	A	Z8GA	2015-06-12
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
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	
SIP	10.2X9.2X4.5	3	Through-hole	
Comment	Package: TO 220 ISO FULL PACK IN LINE; MDF valid for STF100N6F7			

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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 2014				
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	T3FP*OD64TSF						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Die or Dies	Other inorganic materials	0.987	mg	supplier	die	Silicon (Si)	7440-21-3		0.863	mg	874367	454	
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.043	mg	43566	23	
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.049	mg	49645	26	
Die or Dies				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	2026	1	
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.02	mg	20263	11	
Die or Dies				supplier	back side metallization	Vanadium (V)	7440-62-2		0.002	mg	2026	1	
Die or Dies				supplier	back side metallization	Silver (Ag)	7440-22-4		0.008	mg	8105	4	
Leadframe	Copper & its alloys	581.642	mg	supplier	alloy	Copper (Cu)	7440-50-8		578.06	mg	993842	304242	
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.579	mg	995	305	
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.173	mg	297	91	
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		2.813	mg	4836	1481	
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.017	mg	29	9	
Soft solder	Solder	5.03	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.805	mg	955268	2529	
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.125	mg	24851	66	
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.1	mg	19881	53	
Bonding wire	Other inorganic materials	1.05	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.05	mg	1000000	553	
encapsulation	Other inorganic materials	1305.407	mg	supplier	mold compound	Silica, vitreous	60676-86-0		97.906	mg	75000	51529	
encapsulation				supplier	mold compound	Quartz	14808-60-7		913.784	mg	699999	480939	
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		182.756	mg	139999	96187	
encapsulation				supplier	mold compound	phenol resin	Proprietary		91.379	mg	70000	48094	
encapsulation				supplier	mold compound	carbon black	1333-86-4		6.527	mg	5000	3435	
encapsulation				supplier	mold compound	metal hydroxide	Proprietary		13.055	mg	10001	6871	
connections coating	Solder	5.884	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.884	mg	1000000	3097	