



## 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>	2015-10-26
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD 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
STPS10L60CFP	HFUI*F55Q02U	A	Z8GA	2015-10-26
	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	
DIP	10.2 - 9.15 - 4.5	3	Through-hole	
Comment	Package: TO 220 ISOL FULL PACK 0.5 AB			

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-15th June 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	HFUI*F55Q02U					
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	7.971	mg	supplier	die	Silicon (Si)	7440-21-3		6.776	mg	850063	3566
				supplier	metallization	Aluminium (Al)	7429-90-5		0.280	mg	35132	147
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	753	3
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	1255	5
				supplier	metallization	Nickel (Ni)	7440-02-0		0.031	mg	3890	16
				supplier	Passivation	Silicon Oxide	7631-86-9		0.041	mg	5144	22
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	376	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	1255	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.046	mg	5772	24
				supplier	polymer die coating	Durimide	proprietary		0.768	mg	96361	404
				supplier	alloy	Copper (Cu)	7440-50-8		1016.162	mg	998498	534822
				supplier	alloy	Iron(Fe)	7439-89-6		1.019	mg	1001	536
				supplier	alloy	Phosphorus(P)	12185-10-3		0.510	mg	501	268
Soft solder	Solder	1.723	mg	supplier	solder	Tin(Sn)	7440-31-5		0.035	mg	20313	18
				supplier	solder	Silver(Ag)	7440-22-4		0.043	mg	24956	23
				JIG-R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.645	mg	954730	866
Bonding wires	Other inorganic materials	26.527	mg	supplier	wire	Aluminum(Al)	84195-93-7		26.527	mg	1000000	13962
Encapsulation	Other Organic Materials	816.792	mg	supplier	mold compound	Solid Epoxy Resin	25068-38-6		81.679	mg	100000	42989
				supplier	mold compound	Phenol Resin	29690-82-2		57.175	mg	69999	30092
				supplier	mold compound	Fused Silica	60676-86-0		41.248	mg	50500	21709
				supplier	mold compound	Crystalline Silica	14808-60-7		612.595	mg	750001	322418
				supplier	mold compound	Carbon Black	1333-86-4		0.409	mg	501	215
				supplier	mold compound	Metal Hydroxide	21645-51-2		23.686	mg	28999	12466
Connections coating	Solder	29.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		29.296	mg	1000000	15419