



## 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>	2014-10-14
<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>	AMS & 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
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**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
	7FIK*F56S02S	A	Z8GA	2014-10-14
Amount	UoM	Unit type	ST ECOPACK Grade	
310.00	mg	Each	ECOPACK® 2	

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



Package Designator	Size	Nbr of instances	Shape	
SIP	6.1X6.5X2.3	3	Through-hole	
Comment	Package: IPAK TO-251; MDF valid for STPS2045CH			

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

QueryList : REACH-16th June 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	7FIK*F565025					
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	4.44	mg	supplier	die	Silicon (Si)	7440-21-3		4.302	mg	968919	13877
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	6081	87
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	901	13
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.006	mg	1351	19
Die or Dies				supplier	metallization	Nickel (Ni)	7440-02-0		0.019	mg	4279	61
Die or Dies				supplier	metallization	Gold (Au)	7440-57-5		0.019	mg	4279	61
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.026	mg	5856	84
Die or Dies				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	450	6
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1351	19
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.029	mg	6532	94
Leadframe	Copper & its alloys	190.631	mg	supplier	alloy	Copper (Cu)	7440-50-8		189.492	mg	994025	611265
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.19	mg	997	613
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.057	mg	299	184
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.884	mg	4637	2852
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.008	mg	42	26
Soft solder	Solder	2.035	mg	JIG - R	Lead/Lead Compounds	Lead (Pb)	7439-92-1	7a. Lead in high me	1.943	mg	954791	6268
Soft solder				supplier	Soft solder	Silver (Ag)	7440-22-4		0.051	mg	25061	165
Soft solder				supplier	Soft solder	Tin (Sn)	7440-31-5		0.041	mg	20147	132
Bonding wire	Other inorganic materials	1.81	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.81	mg	1000000	5839
encapsulation	Other inorganic materials	109.591	mg	supplier	mold compound	Silica, vitreous	60676-86-0		95.345	mg	870008	307565
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		10.959	mg	99999	35352
encapsulation				supplier	mold compound	Phenol resin	Proprietary		2.739	mg	24993	8835
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.548	mg	5000	1768
connections coating	Solder	1.493	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.493	mg	1000000	4816