



## 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>	2014-04-08
<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>	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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<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
	CSKZ*6L31BCF	A	Z8GA	2014-04-08
Amount	UoM	Unit type	ST ECOPACK Grade	
17.00	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	
SOT	2.8X1.5X0.9	6	gull wing	
Comment	Package: SOT 23 - 6 LEADS PMOS STRIP; MDF valid for STT6N3LLH6			

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 December 2013				
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	CSK2*6L31BCF						
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	0.475	mg	die	die	Silicon (Si)	7440-21-3		0.446	mg	938947	26235	
Silicon die				metallization	metallization	Aluminium (Al)	7429-90-5		0.012	mg	25263	706	
Silicon die				metallization	metallization	Copper (Cu)	7440-50-8		0.005	mg	10526	294	
Silicon die				passivation	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	6316	176	
Silicon die				passivation	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	8421	235	
Silicon die				back side metallization	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	8421	235	
Silicon die				back side metallization	back side metallization	Silver (Ag)	7440-22-4		0.001	mg	2105	59	
Lead frame	Other inorganic materials	6.34	mg	supplier	Alloy	Copper(CU)	7440-50-8		6.026	mg	950473	354471	
Lead frame				supplier	Alloy	Iron(Fe)	7439-89-6		0.146	mg	23028	8588	
Lead frame				supplier	Alloy	Phosphorus(P)	12185-10-3		0.005	mg	789	294	
Lead frame				supplier	Alloy	Zinc(Zn)	7440-66-6		0.008	mg	1262	471	
Lead frame				supplier	metallization	Silver(Ag)	7440-22-4		0.155	mg	24448	9118	
Die attach	Other inorganic materials	0.144	mg	supplier	glue	Silver (Ag)	7440-22-4		0.126	mg	875000	7412	
Die attach				supplier	glue	Bismaleimide resin	Proprietary		0.007	mg	48611	412	
Die attach				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.011	mg	76389	647	
Bonding wire	Other inorganic materials	0.164	mg	supplier	wire	Copper(CU)	7440-50-8		0.164	mg	1000000	9647	
encapsulation	Other inorganic materials	9.675	mg	supplier	mold compound	Silica, vitreous	60676-86-0		8.369	mg	865013	492294	
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		0.774	mg	80000	45529	
encapsulation				supplier	mold compound	Phenol resin	Proprietary		0.484	mg	50026	28471	
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.048	mg	4961	2824	
connections coating	Solder	0.202	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.202	mg	1000000	11882	