



## 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  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2014-01-14
<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>	Antonella Lanzafame	<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

**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
	KDQ7*R8516Y	A	BO2A	2014-01-14
Amount	UoM	Unit type	ST ECOPACK Grade	
150.00	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 o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3,9,9,9,1.25	16	gull wing	
Comment	SO 16 .15 TO JEDEC MS-012; MD valid for CP: M74HC4851YRM13TR.			

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-20th June 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	KDQ7*R851I6Y					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	1.051	mg	supplier	die	Silicon (Si)	7440-21-3		1.027	mg	977165	6847
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	4757	33
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	1903	13
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	951	7
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	2854	20
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.013	mg	12369	87
Leadframe	Copper & its alloys	32.026	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.084	mg	970586	207227
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.731	mg	22825	4873
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1374	293
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1187	253
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.117	mg	3653	780
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.004	mg	125	27
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	125	27
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.004	mg	125	27
Soft solder	Solder	0.189	mg	supplier	solder	Silver (Ag)	7440-22-4		0.172	mg	910053	1147
Soft solder				supplier	solder	acrylate	Proprietary		0.009	mg	47619	60
Soft solder				supplier	solder	Methacrylate	Proprietary		0.008	mg	42328	53
Bonding wire	Other inorganic materials	0.102	mg	supplier	wire	Copper (Cu)	7440-50-8		0.102	mg	1000000	680
encapsulation	Other Organic Materials	116.632	mg	supplier	mold compound	Epoxy Resin	Proprietary		8.747	mg	74997	58313
encapsulation				supplier	mold compound	Phenol Resin	Proprietary		5.832	mg	50003	38880
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		101.003	mg	865997	673353
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.583	mg	4999	3887
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.467	mg	4004	3113