



## 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>	2017-07-14
<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>	AMG 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
KRQ7*D310TAW	KRQ7*D310TAW	A	SH1A	2017-07-14
	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		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	3,9,9.85,1.52	16	gull wing	
Comment	Package: SO 16 .15 TO JEDEC MS-012			

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-12th January 2017				
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	KRQ7* D310TAW					
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	5.631	mg	supplier	die	Silicon (Si)	7440-21-3		5.49	mg	974960	36600
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	3907	147
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.014	mg	2486	93
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.105	mg	18647	700
Leadframe	Copper & its alloys	32.086	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.068	mg	968273	207120
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.731	mg	22783	4873
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1371	293
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1184	253
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.188	mg	5859	1253
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.012	mg	374	80
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	156	33
Die attach	Other inorganic materials	1.615	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		1.469	mg	909598	9793
Die attach				supplier	glue or tape	acrylate	Proprietary		0.081	mg	50155	540
Die attach				supplier	glue or tape	Methacrylate	Proprietary		0.065	mg	40248	433
Bonding wire	Precious metals	0.029	mg	supplier	wire	Copper (Cu)	7440-50-8		0.029	mg	1000000	193
encapsulation	Other Organic Materials	110.639	mg	supplier	mold compound	Silica_vitreous	60676-86-0		97.03	mg	876996	646867
encapsulation				supplier	mold compound	Epoxy resin A	EC 413-900-7		4.426	mg	40004	29507
encapsulation				supplier	mold compound	Epoxy resin B	29690-82-2		4.426	mg	40004	29507
encapsulation				supplier	mold compound	phenol resin	Proprietary		3.319	mg	29998	22127
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.332	mg	3001	2213
encapsulation				supplier	mold compound	additive	Proprietary		1.106	mg	9996	7373