



## 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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-01-03
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Floriana SAN BIAGIO	<b>Representative Title</b>	AMG 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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<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 omprehensive 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
	CDK7*3174BF6	A	BO2A	2018-01-03
Amount	UoM	Unit type	ST ECOPACK Grade	
130.00	mg	Each	ECOPACK® 3	
	Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony		

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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	8.6x3.9x1.52	14	gull wing	
Comment	Package: K7 SO 14 .15 TO JEDEC MS-012; MDF valid for MC33174DT			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-7th July 2017				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CDK7*3174BF6					
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	3.180	mg	supplier	die	Silicon (Si)	7440-21-3		3.124	mg	982390	24031
				supplier	metallization	Aluminium (Al)	7429-90-5		0.026	mg	8176	200
				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	4088	100
				supplier	Passivation	Silicon Oxide	7631-86-9		0.017	mg	5346	131
Leadframe	Copper & its alloys	37.097	mg	supplier	alloy	Copper (Cu)	7440-50-8		34.860	mg	939699	268154
				supplier	alloy	Iron (Fe)	7439-89-6		0.820	mg	22104	6308
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.049	mg	1321	377
				supplier	alloy	Zinc (Zn)	7440-66-6		0.043	mg	1159	331
				supplier	metallization	Nickel (Ni)	7440-02-0		0.287	mg	7736	2208
				supplier	metallization	Palladium (Pd)	7440-05-3		0.009	mg	243	69
				supplier	metallization	Gold (Au)	7440-57-5		0.009	mg	243	69
Die attach	Other Organic Materials	1.131	mg	supplier	metallization	Silver (Ag)	7440-22-4		1.020	mg	27495	7846
				supplier	glue	Silver (Ag)	7440-22-4		0.994	mg	878868	7646
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.057	mg	50398	438
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.057	mg	50398	438
Bonding wires	Other inorganic materials	0.127	mg	supplier	glue	Acrylate polymer	87320-05-6		0.023	mg	20336	177
				supplier	wire	Copper (Cu)	7440-50-8		0.127	mg	1000000	977
				supplier	glue	Acrylate polymer	87320-05-6		0.023	mg	20336	177
Encapsulation	Other Organic Materials	87.564	mg	supplier	mold compound	Silica, vitreous	60676-86-0		75.831	mg	866007	583315
				supplier	mold compound	Epoxy Resin	29690-82-2		6.567	mg	75006	50515
				supplier	mold compound	Phenol Resin	25068-38-6		4.378	mg	49998	33677
				supplier	mold compound	Carbon black	1333-86-4		0.438	mg	5002	3369
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.350	mg	3997	2692
connections coating	Solder	0.900	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.900	mg	1000000	6923