



## 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>	2018-04-06
<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>	AMS 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 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
	CDK7*V324AR6	A	BO2A	2018-04-06
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	K7 SO 14 .15 TO JEDEC MS-012; MDF valid for LMV324IDT			

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-15th January 2018				
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						Mfr Item Name	CDK7*V324AR6					
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	2.981	mg	supplier	die	Silicon (Si)	7440-21-3		2.951	mg	989936	22700
				supplier	metallization	Aluminium (Al)	7429-90-5		0.010	mg	3355	77
				supplier	Passivation	Silicon Nitride	12033-89-5		0.008	mg	2684	62
				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	2013	46
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.006	mg	2013	46
Leadframe	Copper & its alloys	37.968	mg	supplier	alloy	Copper (Cu)	7440-50-8		34.860	mg	918142	268154
				supplier	alloy	Iron (Fe)	7439-89-6		0.820	mg	21597	6308
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.049	mg	1291	377
				supplier	alloy	Zinc (Zn)	7440-66-6		0.043	mg	1133	331
				supplier	metallization	Nickel (Ni)	7440-02-0		0.460	mg	12115	3538
				supplier	metallization	Palladium (Pd)	7440-05-3		0.029	mg	764	223
				supplier	metallization	Gold (Au)	7440-57-5		0.012	mg	316	92
				supplier	coating	Silver (Ag)	7440-22-4		1.695	mg	44643	13038
Die attach	Other inorganic materials	1.069	mg	supplier	glue	Silver (Ag)	7440-22-4		0.971	mg	908326	7469
				supplier	glue	acrylate	Proprietary		0.053	mg	49579	408
				supplier	glue	Methacrylate	Proprietary		0.043	mg	40225	331
				supplier	glue	acrylate	Proprietary		0.001	mg	935	8
				SVHC	glue	NMP	872-50-4		0.001	mg	935	8
Bonding wires	Other inorganic materials	0.127	mg	supplier	wire	Copper (Cu)	7440-50-8		0.127	mg	1000000	977
Encapsulation	Other Organic Materials	86.956	mg	supplier	mold compound	Silica, vitreous	60676-86-0		75.303	mg	865990	579254
				supplier	mold compound	Epoxy Resin	29690-82-2		6.522	mg	75003	50169
				supplier	mold compound	Phenol Resin	25068-38-6		4.348	mg	50002	33446
				supplier	mold compound	Carbon black	1333-86-4		0.435	mg	5003	3346
				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.348	mg	4002	2677
connections coating	Solder	0.900	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.900	mg	1000000	6923