



## 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>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-09-08
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		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>	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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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**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
	KD6R*V814BCY	A	BO2A	2017-09-08
Amount	UoM	Unit type	ST ECOPACK Grade	
54.82	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	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5x4.4x0.9	14	gull wing	
Comment	Package: 6R TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for LMV824AIYPT			

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	KD6R*V814BCY				5000001.0	1000001.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.983	mg	supplier	die	Silicon (Si)	7440-21-3		0.942	mg	958291	17184
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	9156	164
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1017	18
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1017	18
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2035	36
				supplier	Passivation	Silicon Oxide	7631-86-9		0.020	mg	20346	365
Leadframe	M-004 Copper and its alloys	24.847	mg	supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.008	mg	8138	146
				supplier	alloy	Copper (Cu)	7440-50-8		24.545	mg	987846	447738
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.038	mg	1529	693
				supplier	alloy	Silicon (Si)	7440-21-3		0.166	mg	6681	3028
				supplier	metallization	Nickel (Ni)	7440-02-0		0.089	mg	3582	1623
				supplier	metallization	Palladium (Pd)	7440-05-3		0.003	mg	121	55
Die attach	M-015 Other organic materials	0.380	mg	supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	121	55
				supplier	metallization	Silver (Ag)	7440-22-4		0.003	mg	121	55
				supplier	glue	Silver (Ag)	7440-22-4		0.334	mg	878947	6093
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.019	mg	50000	347
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.019	mg	50000	347
				supplier	glue	Acrylate polymer	87320-05-6		0.008	mg	21053	146
Bonding wires	M-011 Other inorganic materials	0.127	mg	supplier	wire	Copper (Cu)	7440-50-8		0.127	mg	1000000	2317
Encapsulation	M-011 Other inorganic materials	28.483	mg	supplier	mold compound	Silica, vitreous	60676-86-0		24.980	mg	877014	455673
				supplier	mold compound	Epoxy resin	85954-11-6		1.139	mg	39989	20777
				supplier	mold compound	Epoxy	29690-82-2		1.139	mg	39989	20777
				supplier	mold compound	phenol resin	Proprietary		0.855	mg	30018	15596
				supplier	mold compound	additive	Proprietary		0.285	mg	10006	5199
				supplier	mold compound	carbon black	1333-86-4		0.085	mg	2984	1551