



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-11-22
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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*V339AAY	A	BO2A	2018-11-22
	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	6R TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for TS3341YPT			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : REACH-27th June 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
;				0
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	KD6R*V339AAY				4999999.0	999999.0	
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	0.950	mg	supplier	die	Silicon (Si)	7440-21-3		0.919	mg	967368	16764	
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	8421	146	
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1053	18	
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1053	18	
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2105	36	
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	20000	347	
Leadframe	M-004 Copper and its alloys	23.838	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.912	mg	961154	417950	
				supplier	alloy	Nickel (Ni)	7440-02-0		0.715	mg	29994	13043	
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.036	mg	1510	657	
				supplier	alloy	Silicon (Si)	7440-21-3		0.155	mg	6502	2827	
	M-006 Nickel and its alloys				supplier	metallization	Nickel (Ni)	7440-02-0		0.018	mg	755	328
					supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	42	18
	M-008 Precious metals				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	42	18
					supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	42	18
Die attach	M-015 Other organic materials	0.374	mg	supplier	glue	Silver (Ag)	7440-22-4		0.328	mg	877005	5983	
				supplier	glue	isobornyl Methacrylate	7534-94-3		0.019	mg	50802	347	
				supplier	glue	Acrylate resin	5888-33-5		0.019	mg	50802	347	
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.008	mg	21390	146	
Bonding wires	M-011 Other inorganic materials	0.076	mg	supplier	wire	Copper (Cu)	7440-50-8		0.076	mg	1000000	1386	
Encapsulation	M-015 Other organic materials	29.582	mg	supplier	mold compound	Silica, vitreous	60676-86-0		25.943	mg	876986	473240	
				supplier	mold compound	Epoxy resin	85954-11-6		1.183	mg	39991	21580	
				supplier	mold compound	Epoxy	29690-82-2		1.183	mg	39991	21580	
				supplier	mold compound	phenol resin	Proprietary		0.888	mg	30018	16198	
				supplier	mold compound	additive	Proprietary		0.296	mg	10006	5399	
				supplier	mold compound	carbon black	1333-86-4		0.089	mg	3009	1623	