



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-01-27
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMS MD CHAMPION
Representative Phone *	Refer to Supplier Comment section		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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
	KD6R*V339AAL	A	BO2A	2016-01-27
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	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	5 x4.4 x 0.9	14	gull wing	
Comment	Package: 6R TSSOP 14 BODY 4.4 PITCH 0.65; MDF valid for TS334IPT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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-17th December 2015				
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	KD6R*V339AAL					
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	0.969	mg	supplier	die	Silicon (Si)	7440-21-3		0.919	mg	948400	16764
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	8256	146
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1032	18
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1032	18
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	2064	36
				supplier	Passivation	Silicon Oxide	7631-86-9		0.019	mg	19608	347
				supplier	glass coating	Glass: Silicon Dioxide	7631-86-9		0.019	mg	19608	347
Leadframe	Copper & its alloys	27.782	mg	supplier	alloy	Copper (Cu)	7440-50-8		26.326	mg	947592	480226
				supplier	alloy	Nickel (Ni)	7440-02-0		0.821	mg	29552	14976
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.041	mg	1476	748
				supplier	alloy	Silicon (Si)	7440-21-3		0.178	mg	6407	3247
				supplier	metallization	Nickel (Ni)	7440-02-0		0.285	mg	10258	5199
				supplier	metallization	Palladium (Pd)	7440-05-3		0.018	mg	648	328
				supplier	metallization	Gold (Au)	7440-57-5		0.008	mg	288	146
Die attach	Other Organic Materials	0.373	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.105	mg	3779	1915
				supplier	glue	Silver (Ag)	7440-22-4		0.328	mg	879357	5983
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.019	mg	50938	347
				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.019	mg	50938	347
				supplier	glue	Acrylate polymer	87320-05-6		0.007	mg	18767	128
				supplier	wire	Copper (Cu)	7440-50-8		0.076	mg	1000000	1386
				supplier	mold compound	Silica, vitreous	60676-86-0		22.468	mg	876971	409850
Encapsulation	Other Organic Materials	25.620	mg	supplier	mold compound	Epoxy resin	85954-11-6		1.025	mg	40008	18698
				supplier	mold compound	Epoxy	29690-82-2		1.025	mg	40008	18698
				supplier	mold compound	phenol resin	Proprietary		0.769	mg	30016	14028
				supplier	mold compound	additive	Proprietary		0.256	mg	9992	4670
				supplier	mold compound	carbon black	1333-86-4		0.077	mg	3005	1405