



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-02-27
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana San Biagio	Representative Title	AMG 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
	RWSX*KA05FC1	A	Z4XA	2017-02-27
Amount	UoM	Unit type	ST ECOPACK Grade	
216.20	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
ating is used or other bulk terminati	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	4.6x4.6x3.5	3	flat	
Comment	Package: SX TO 92; MDF valid for LM2931AZ50R			

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-12th January 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						Mfr Item Name	RWSX*KA05FC1									
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	1.481	mg	supplier	die	Silicon (Si)	7440-21-3		1.446	mg	976367	6688				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.013	mg	8778	60				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	3376	23				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	4727	32				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	675	5				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1350	9				
Leadframe	Copper & its alloys	98.839	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	4727	32				
				supplier	Alloy	Copper (Cu)	7440-50-8		98.739	mg	998988	456702				
				supplier	Alloy	Iron (Fe)	7439-89-6		0.070	mg	708	324				
				supplier	Alloy	Phosphorus (P)	12185-10-3		0.030	mg	304	139				
				Die attach	Other Organic Materials	0.181	mg	supplier	Glue	Silver (Ag)	7440-22-3		0.131	mg	723757	606
								supplier	Glue	Bisphenol F type epoxy resin	9003-36-5		0.036	mg	198895	167
Bonding wires	Precious metals	1.744	mg	supplier	Glue	Phenol derivative	Proprietary		0.007	mg	38674	32				
				supplier	Glue	Di propylene glycol mono methyl ether	34590-94-8		0.007	mg	38674	32				
				supplier	wire	Gold (Au)	7440-57-5		1.744	mg	1000000	8067				
	Other Organic Materials	111.709	mg	supplier	Molding compound	Silicone dioxide (Quartz)	14808-60-7		94.949	mg	849967	439172				
				supplier	Molding compound	Cristobalite	14464-46-1		1.119	mg	10017	5176				
				supplier	Molding compound	Epoxy Resin	25068-38-6		11.185	mg	100126	51735				
Finishing	Solder	2.257	mg	supplier	Molding compound	Phenol Resin	29690-82-2		2.228	mg	19945	10305				
				supplier	Molding compound	AntimonyTrioxide	1309-644		1.673	mg	14976	7738				
				supplier	Molding compound	Carbon Black	1333-86-4		0.555	mg	4968	2567				
				supplier	Connection coating	Tin (Sn)	7440-31-5		2.257	mg	1000000	10439				