



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 *	2018-01-26
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	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 omprehensive 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
	RVWX*S822AR6	A	ZS1A	2018-01-26
Amount	UoM	Unit type	ST ECOPACK Grade	
10.00	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant		

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	
tin is used or other bulk terminat	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.8x1.5x0.9	3	gull wing	
Comment	WX SOT 23 3 LDS; MDF valid for TS4040EILT-2.5			

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	RVWX*5822AR6					
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	0.442	mg	supplier	die	Silicon (Si)	7440-21-3		0.437	mg	988688	43700
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	4525	200
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	4525	200
				supplier	Passivation	Silicon Oxide	7631-86-9		0.001	mg	2262	100
Leadframe	Copper & its alloys	2.237	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.160	mg	965579	216000
				supplier	alloy	Iron (Fe)	7439-89-6		0.051	mg	22798	5100
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	447	100
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1341	300
Die attach	Other Organic Materials	0.028	mg	supplier	metallization	Silver (Ag)	7440-22-4		0.022	mg	9835	2200
				supplier	glue	Silver (Ag)	7440-22-4		0.022	mg	785714	2200
				supplier	glue	Carbocyclic Acrylates	proprietary		0.003	mg	107143	300
				supplier	glue	Bismaleimide resin	35325-39-4		0.001	mg	35714	100
Bonding wires	Other inorganic materials	0.028	mg	supplier	glue	2-preponic acid, 2-methyl	68586-19-6		0.001	mg	35714	100
				supplier	glue	Additive	proprietary		0.001	mg	35714	100
				supplier	wire	Copper (Cu)	7440-50-8		0.027	mg	964286	2700
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	35714	100
Encapsulation	Other Organic Materials	7.074	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.212	mg	29969	21200
				supplier	mold compound	Epoxy Resin-2	25068-38-6		0.212	mg	29969	21200
				supplier	mold compound	Phenol resin	29690-82-2		0.318	mg	44953	31800
				supplier	mold compound	Silica	60676-86-0		6.318	mg	893130	631800
Finishing	Other inorganic materials	0.191	mg	supplier	mold compound	Carbon Black	1333-86-4		0.014	mg	1979	1400
				supplier	Connection coating	Tin (Sn)	7440-31-5		0.191	mg	1000000	19100