



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 *	2017-01-27
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

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
	IYW8*N6VAVF6	A	ZS1A	2017-01-27
Amount	UoM	Unit type	ST ECOPACK Grade	
6.00	mg	Each	ECOPACK® 3	

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	
ating is used or other bulk terminati	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2x1.26x0.93	5	gull wing	
Comment	Package: W8 SOT 323 SLDS; MDF valid for STWD100PYW83F			

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	IYW8*NGVAVF6					
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	0.506	mg	supplier	die	Silicon (Si)	7440-21-3		0.318	mg	628458	53000
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	3953	333
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1976	167
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	1976	167
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	7905	667
				supplier	polymer die coating	PIX1 Polyimide	108-65-6		0.180	mg	355731	30000
Leadframe	Copper & its alloys	2.773	mg	supplier	alloy	Iron (Fe)	7439-89-6		0.063	mg	22719	10500
				supplier	alloy	Copper (Cu)	7440-50-8		2.670	mg	962856	445000
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	361	167
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	1442	667
				supplier	metallization	Nickel (Ni)	7440-02-0		0.032	mg	11540	5333
				supplier	metallization	Palladium (Pd)	7440-05-3		0.003	mg	1082	500
Die attach	Other Organic Materials	0.020	mg	supplier	glue	Silver (Ag)	7440-22-4		0.015	mg	750000	2500
				supplier	glue	Carbocyclic Acrylates	Proprietary		0.002	mg	100000	333
				supplier	glue	Bismaleimide resin	35325-39-4		0.002	mg	100000	333
				supplier	glue	2-preponoic acid, 2-methyl	68586-19-6		0.001	mg	50000	167
Bonding wires	Precious metals	0.031	mg	supplier	wire	Gold (Au)	7440-57-6		0.031	mg	1000000	5167
Encapsulation	Other Organic Materials	2.670	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.053	mg	19850	8833
				supplier	mold compound	Epoxy Resin-2	Proprietary		0.053	mg	19850	8833
				supplier	mold compound	Epoxy Resin	25068-38-6		0.053	mg	19850	8833
				supplier	mold compound	Phenol resin	29690-82-2		0.107	mg	40075	17833
				supplier	mold compound	Silica	60676-86-0		2.398	mg	898127	399667
				supplier	mold compound	Carbon black	1333-86-4		0.006	mg	2247	1000