



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 *	2015-08-26
Contact Name *	Refer to "Supplier Comment" section	Contact Title	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 Materials Declaration 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/internet/com/support/online_tech_support.jsp		

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
	DZWX*96VAASC	A	ZS1A	2015-08-26
Amount	UoM	Unit type	ST ECOPACK Grade	
9.00	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		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOT	2.8-1.5-0.9	3	gull wing	
Comment	Package: WX SOT 23 3 LDS; MDF valid for STM1815SWX7F			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-17th December 2014				
Query				Response
The product 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	DZWX*96VAASC					
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	0.566	mg	supplier	die	Silicon (Si)	7440-21-3		0.555	mg	980565	61667
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	3534	222
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	1767	111
Die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.002	mg	3534	222
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.006	mg	10601	667
Leadframe	Copper & its alloys	2.426	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.335	mg	963389	259444
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.055	mg	22563	6111
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.001	mg	426	111
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1277	333
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.028	mg	11494	3111
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	851	222
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	824	222
Die attach	Other inorganic materials	0.065	mg	supplier	Glue	Epoxyde Bisphenol A Resin	25068-38-6		0.009	mg	138462	1000
Die attach				supplier	Glue	Silica, vitreous	60676-86-0		0.012	mg	184615	1333
Die attach				supplier	Glue	2-(2-Ethoxyethoxy)ethyl acetate	112-15-2		0.002	mg	30769	222
Die attach				supplier	Glue	Aluminium oxide	1344-28-1		0.023	mg	353846	2556
Die attach				supplier	Glue	Bisphenol A diglycidyl ether polymer	25036-25-3		0.014	mg	215385	1556
Die attach				supplier	Glue	Glycol ether ester	Proprietary		0.002	mg	30769	222
Die attach				supplier	Glue	Diaminodiphenylsulfone	80-08-0		0.002	mg	30769	222
Die attach				supplier	Glue	Aminopropyltriethoxysilane	919-30-2		0.001	mg	15385	111
Bonding wire	Precious metals	0.067	mg	supplier	wire	Gold (Au)	7440-57-5		0.067	mg	1000000	7444
Encapsulation	Other inorganic materials	5.877	mg	supplier	mold compound	Silica, vitreous	60676-86-0		5.278	mg	898077	586444
Encapsulation				supplier	mold compound	epoxy resin	Proprietary		0.216	mg	36753	24000
Encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.248	mg	42198	27556
Encapsulation				supplier	mold compound	phenolic resin	Proprietary		0.123	mg	20929	13667
Encapsulation				supplier	mold compound	carbon black	1333-86-4		0.012	mg	2042	1333