



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 *	2014-06-16
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 *	Antonella Lanzafame	Representative Title	AMS & IPD 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
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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
	DYWY*NGVAY0Y	A	ZS1A	2014-06-16
Amount	UoM	Unit type	ST ECOPACK Grade	
17.10	mg	Each	ECOPACK® 2	

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	
Not Applicable ; if coating is used o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.8X1.5X0.9	5	gull wing	
Comment	SOT 23-5; MD valid for CP :STWD100YNYWY3F.			

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-16th December 2013				
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	DYWY*NGVAYOY					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	0.231	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		0.227	mg	982684	13275
Silicon Die				Supplier	Die metallization	Aluminium (Al)	7429-90-5		0.001	mg	4329	58
Silicon Die						Gamma-butyrolactone	96-48-0		0.002	mg	8658	117
Silicon Die						Polyhydroxyamide	55295-98-2		0.001	mg	4329	58
Leadframe	Copper & its alloys	8.16	mg	Supplier	Alloy	Copper (Cu)	7440-50-8		7.9	mg	968137	461988
Leadframe						Iron (Fe)	7439-89-6		0.16	mg	19608	9357
Leadframe						Zinc (Zn)	7440-66-0		0.01	mg	1225	585
Leadframe				Supplier	Coating	Nickel (Ni)	7440-02-0		0.08	mg	9804	4678
Leadframe						Palladium (Pd)	7440-05-3		0.01	mg	1225	585
Die Attach	Other inorganic materials	0.101	mg	Supplier	Glue	Epoxyde Bisphenol A Resin	25068-38-6		0.028	mg	277228	1637
Die Attach						Aromatic amine	Proprietary		0.004	mg	39604	234
Die Attach						Glycol ether ester	Proprietary		0.004	mg	39604	234
Die Attach						silica	60676-86-0		0.031	mg	306931	1813
Die Attach						Aluminium oxide	1344-28-1		0.034	mg	336634	1988
Bonding wire	Other inorganic materials	0.24	mg	Supplier	Bonding wire	Gold (Au)	7440-57-5		0.24	mg	1000000	14035
Encapsulation	Other Organic Materials	8.368	mg	Supplier	Moulding Compound	Silica, vitreous	60676-86-0		7.137	mg	852892	417368
Encapsulation						phenolic resin	Proprietary		0.293	mg	35014	17135
Encapsulation						epoxy resin	Proprietary		0.335	mg	40033	19591
Encapsulation						Biphenyl epoxy resin	85954-11-6		0.167	mg	19957	9766
Encapsulation						carbon black	1333-86-4		0.017	mg	2032	994
Encapsulation						Zinc hydroxide	20427-58-1		0.084	mg	10038	4912
Encapsulation						Magnesium hydroxide	1309-42-8		0.335	mg	40033	19591