



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 *	10/03/2014
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 *	Giuseppe Vitali Palma	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
	HJW9*NHBAT43	A	Z55A	10/03/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
6.249	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOT	1.25X2.00X0.95	3	gull wing	
Comment	Package: SOT 323 - 3LEADS; MD valid for BAT54WFILM			

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 June 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	HIW9*NHBAT43					
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	0.093	mg	supplier	Silicon die	Si	7440-21-3		0.088	mg	946237	14082
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	43011	640
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.001	mg	10753	160
leadframe	Copper & its alloys	1.729	mg	supplier	Alloy	Fe	7439-89-6		0.96	mg	555234	153625
leadframe				supplier	Alloy	Mn	7439-96-5		0.01	mg	5784	1600
leadframe				supplier	Alloy	Cr(not Cr 6+)	7440-47-3		0.002	mg	1157	320
leadframe				supplier	Alloy	Co	7440-48-4		0.008	mg	4627	1280
leadframe				supplier	Alloy	Si	7440-21-3		0.003	mg	1735	480
leadframe				supplier	Alloy	Nickel	7440-02-0		0.683	mg	395026	109297
leadframe				supplier	coating	Ag	7440-22-4		0.063	mg	36437	10082
bonding wire	Other inorganic materials	0.013	mg	supplier	bonding wire	Au	7440-57-5		0.013	mg	1000000	2080
Encapsulation	Other Organic Materials	4.188	mg	supplier	Molding compound	SiO2	60676-86-0		3.657	mg	873209	585214
Encapsulation				supplier	Molding compound	Epoxy Resin	29690-82-2		0.209	mg	49904	33445
Encapsulation				supplier	Molding compound	Phenol Resin	26834-02-6		0.209	mg	49904	33445
Encapsulation				supplier	Molding compound	Aromatic poly-phosphate	Proprietaty		0.105	mg	25072	16803
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.008	mg	1910	1280
Finishing	Other inorganic materials	0.226	mg	supplier	Connection coating	Sn	7440-31-5		0.226	mg	1000000	36166