



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D  *: Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-02-15
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Floriana San Biagio	<b>Representative Title</b>	AMG Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	AN12*A236AAY	A	Z7GA	2016-02-15
Amount	UoM	Unit type	ST ECOPACK Grade	
21.30	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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
LGA	3x3x0.8	8	No lead	
Comment	Package: A03Y WDFPN 3x3x0.8 8L P0.65 WET.FLK; MDF valid for TSB5721YQ2T			

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 2015				
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	ANIZ*A236AAY					
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	1.281	mg	supplier	die	Silicon (Si)	7440-21-3		1.132	mg	883774	53143
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.024	mg	18868	1135
Silicon die				supplier	metallization	Copper (Cu)	7440-50-8		0.122	mg	95094	5718
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	2264	136
Leadframe	Copper & its alloys	8.534	mg	supplier	Alloy	Copper (Cu)	7440-50-8		8.303	mg	972944	389827
Leadframe				supplier	Alloy	Chromium (Cr)	7440-47-3		0.023	mg	2646	1060
Leadframe				supplier	Alloy	Tin (Sn)	7440-31-5		0.021	mg	2450	982
Leadframe				supplier	Alloy	Zinc (Zn)	7440-66-6		0.017	mg	1960	785
Leadframe				supplier	Coating	Silver (Ag)	7440-22-4		0.171	mg	20000	8013
Die attach	Solder	0.036	mg	supplier	glue or tape	Resin A	9003-36-5		0.003	mg	70000	120
Die attach				supplier	glue or tape	Iron (Fe)	7439-89-6		0.005	mg	140000	239
Die attach				supplier	glue or tape	Phenol Resin	Proprietary		0.005	mg	140000	239
Die attach				supplier	glue or tape	Iron Phosphide (Fe2P)	1310-43-6		0.018	mg	500000	854
Die attach				supplier	glue or tape	Acrylic Copolymer	Proprietary		0.005	mg	150000	256
Bonding Wire	Precious metals	0.248	mg	supplier	wire	Gold (Au)	7440-57-5		0.248	mg	1000000	11638
Encapsulation	Other Organic Materials	10.371	mg	supplier	Molding compound	Silica, vitreous	60676-86-0		8.961	mg	864013	420697
Encapsulation				supplier	Molding compound	Epoxy Resin	Proprietary		0.778	mg	75030	36533
Encapsulation				supplier	Molding compound	Phenol Resin	Proprietary		0.518	mg	49958	24325
Encapsulation				supplier	Molding compound	β-Mercaptopropyl trimethoxysilane	4420-74-0		0.052	mg	5033	2451
Encapsulation				supplier	Molding compound	Quartz	14808-60-7		0.031	mg	2983	1452
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.031	mg	2983	1452
Finishing	Solder	0.830	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.830	mg	1000000	38945