



## 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>	2013-10-15
<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>	Antonella Lanzafame	<b>Representative Title</b>	AMS & IPD 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
	MYND*UL72J51	A	SA1A	2013-10-15
Amount	UoM	Unit type	ST ECOPACK Grade	
36.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	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	
QFP	4.0,4.0,0.9	24	flat	
Comment	VFQFPN 4x4x1.0 24 PITCH 0.5; MD valid for CP: STOTG04EQTR .			

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-20th June 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	MYND*UL72J51					
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	1.334	mg	supplier	Silicon Die	Silicon (Si)	7440-21-3		1.276	mg	956522	35444
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.013	mg	9745	361
Silicon Die				supplier	metallization	Tungsten (W)	7440-33-7		0.01	mg	7496	278
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.003	mg	2249	83
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.022	mg	16492	611
Silicon Die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.007	mg	5247	194
Silicon Die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.003	mg	2249	83
Leadframe	Copper and its alloy	16.174	mg	supplier	Alloy	Iron	7439-89-6		0.364	mg	22505	10111
Leadframe				supplier	Alloy	Copper	7440-50-8		15.623	mg	965933	433972
Leadframe				supplier	Alloy	Phophorus	7723-14-0		0.004	mg	247	111
Leadframe				supplier	Alloy	Zinc	7440-66-6		0.021	mg	1298	583
Leadframe				supplier	Alloy	Silver	7440-22-4		0.162	mg	10016	4500
Die attach	Other organic materials	0.061	mg	supplier	Glue	Silver (60-100%)	7440-22-4		0.043	mg	704918	1194
Die attach				supplier	Glue	Carbocyclic Acrylates	Proprietary		0.012	mg	196721	333
Die attach				supplier	Glue	Bismaleimide resin	Proprietary		0.002	mg	32787	56
Die attach				supplier	Glue	Acrylate	Proprietary		0.002	mg	32787	56
Die attach				supplier	Glue	Additive	Proprietary		0.002	mg	32787	56
Bonding wire	Other inorganic materials	0.419	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.419	mg	1000000	11639
Encapsulation	Other organic materials	17.772	mg	supplier	Molding compound	Silica fused	60676-86-0		15.675	mg	882005	435417
Encapsulation				supplier	Molding compound	Epoxy Resin	Proprietary		1.244	mg	69998	34556
Encapsulation				supplier	Molding compound	Phenol Resin	Proprietary		0.622	mg	34999	17278
Encapsulation				supplier	Molding compound	Antimony Trioxide	1309-64-4		0.089	mg	5008	2472
Encapsulation				supplier	Molding compound	Brominated epoxy resin	40039-93-8		0.089	mg	5008	2472
Encapsulation				supplier	Molding compound	Carbon black	1333-86-4		0.053	mg	2982	1472
Finishing	Other inorganic materials	0.24	mg	supplier	Connection coating	Sn	7440-31-5		0.24	mg	1000000	6667