



## 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
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2014-09-01
<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>	Giovanni Giacopello	<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
	812Q*6TAN06A	A	Z6HA	2014-09-01
Amount	UoM	Unit type	ST ECOPACK Grade	
2.40	mg	Each	ECOPACK® 2	

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	
NAC	1 - 1.6 - 0.6	2	No lead	
Comment	Package:DFN.16.10.06-105-2L; MDF valid for ESDA7P60-1U1M			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	812Q*6TAN06A					
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	0.177	mg	supplier	die	Silicon (Si)	7440-21-3		0.164	mg	926554	68333
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	39548	2917
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.004	mg	22599	1667
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.002	mg	11299	833
Leadframe	Copper and its alloy	0.716	mg	supplier	alloy	Copper (Cu)	7440-50-8		0.672	mg	938547	280000
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0.025	mg	34916	10417
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0.004	mg	5587	1667
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0.001	mg	1397	417
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.001	mg	1397	417
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	5587	1667
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.008	mg	11173	3333
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	1397	417
Die attach	Other organic materials	0.033	mg	supplier	glue	Silver (Ag)	7440-22-4		0.025	mg	757576	10417
Die attach				supplier	glue	Butyl diethylene glycol acetate	124-17-4		0.003	mg	90909	1250
Die attach				supplier	glue	Bismaleimide resin	Proprietary		0.002	mg	60606	833
Die attach				supplier	glue	High boiling methacrylate	Proprietary		0.001	mg	30303	417
Die attach				supplier	glue	Acrylic monomer	Proprietary		0.001	mg	30303	417
Die attach				supplier	glue	Acrylate	Proprietary		0.001	mg	30303	417
Bonding wire	Other inorganic materials	0.022	mg	supplier	bonding wire	Copper (Cu)	7440-50-8		0.022	mg	1000000	9167
Encapsulation	Other inorganic materials	1.452	mg	supplier	molding compound	Silica Fused	60676-86-0		1.36	mg	936639	566667
Encapsulation				supplier	molding compound	Epoxy Resin	Proprietary		0.044	mg	30303	18333
Encapsulation				supplier	molding compound	Phenol Resin	Proprietary		0.044	mg	30303	18333
Encapsulation				supplier	molding compound	Carbon Black	1333-86-4		0.004	mg	2755	1667