



## 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>	2014-05-28
<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>	Giuseppe Vitali Palma	<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

**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
	MQBI*UA65AA5	A	Z6HA	2014-05-28
Amount	UoM	Unit type	ST ECOPACK Grade	
11.341	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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2X2X0.9	6	No lead	
Comment	Package: VDFPN 6L 2X2X0.9 PITCH 0.65			

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)	<b>false</b>
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	<b>false</b>
Product(s) does not meet EU RoHS requirements and is not under exemptions	<b>false</b>
Product(s) is obsolete, no information is available	<b>false</b>
Product(s) is unknown, no information is available	<b>false</b>
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				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	MQB1*UA65AA5					
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	0.753	mg	SUPPLIER	Die	Si	7440-21-3		0.713	mg	946879	62869
Silicon die			mg	SUPPLIER	metallization	Aluminium (Al)	7429-90-5		0.007	mg	9296	617
Silicon die			mg	SUPPLIER	metallization	Tungsten (W)	7440-33-7		0.006	mg	7968	529
Silicon die			mg	SUPPLIER	passivation	Silicon Nitride (SiN)	68034-42-4		0.002	mg	2656	176
Silicon die			mg	SUPPLIER	passivation	Silicon Oxide(SiO2)	7631-86-9		0.013	mg	17264	1146
Silicon die			mg	SUPPLIER	passivation	Gamma-butyrolactone	96-48-0		0.004	mg	5312	353
Silicon die			mg	SUPPLIER	passivation	Polyhydroxyamide	55295-98-2		0.002	mg	2656	176
Silicon die			mg	SUPPLIER	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	1328	88
Silicon die			mg	SUPPLIER	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1328	88
Silicon die			mg	SUPPLIER	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	5312	353
Leadframe	Copper and its alloy	3.771	mg	SUPPLIER	Alloy	Copper (Remaining)	7440-50-8		3.641	mg	965526	321048
Leadframe			mg	SUPPLIER	Alloy	Iron (2.1~2.6%)	7439-89-6		0.085	mg	22540	7495
Leadframe			mg	SUPPLIER	Alloy	Lead (0.01max)	7439-92-1		0.001	mg	265	88
Leadframe			mg	SUPPLIER	Alloy	Phosphorus (0.015~0.15%)	7723-14-0		0.001	mg	265	88
Leadframe			mg	SUPPLIER	Alloy	Zinc (0.05~0.20%)	7440-66-6		0.005	mg	1326	441
Leadframe			mg	SUPPLIER	Alloy	Silver (0.5~1.5%)	7440-22-4		0.038	mg	10077	3351
Die attach	Other organic materials	0.131	mg	SUPPLIER	Epoxy	Silver (80 - 100%)	7440-22-4		0.096	mg	732824	8465
Die attach			mg	SUPPLIER	Epoxy	methylene diacrylate	42594-17-2		0.022	mg	167939	1940
Die attach			mg	SUPPLIER	Epoxy	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.004	mg	30534	353
Die attach			mg	SUPPLIER	Epoxy	Polymer of Polybutadiene + Anhydride	Proprietary		0.004	mg	30534	353
Die attach			mg	SUPPLIER	Epoxy	Palladium (Pd)	7440-05-3		0.004	mg	30534	353
Bonding wire	Other inorganic materials	0.101	mg	SUPPLIER	Epoxy	Dicumyl peroxide (0.1 - 1.0)	80-43-3		0.001	mg	7634	88
Encapsulation	Other organic materials	6.322	mg	SUPPLIER	Bonding Wire	Au	7440-57-5		0.101	mg	1000000	8906
Encapsulation			mg	SUPPLIER	molding compound	Silica Fused (85~95%)	60676-86-0		5.923	mg	936887	522264
Encapsulation			mg	SUPPLIER	molding compound	Epoxy Resin (1~5%)	Proprietary		0.19	mg	30054	16753
Encapsulation			mg	SUPPLIER	molding compound	Phenol Resin (1~5%)	Proprietary		0.19	mg	30054	16753
Encapsulation			mg	SUPPLIER	molding compound	Carbon Black (0.1~0.5%)	1333-86-4		0.019	mg	3005	1675
Finishing	Other inorganic materials	0.263	mg	SUPPLIER	Connection coating	Sn	7440-31-5		0.263	mg	1000000	23190