



## 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>	2015-04-14
<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

**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
	8BND*UK09BB6	A	ZW1A	2015-04-14
Amount	UoM	Unit type	ST ECOPACK Grade	
44.00	mg	Each	ECOPACK® 2	

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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	4X4X1.0	24	No lead	
Comment	Package: VFQFPN 4x4x1.0 24 PITCH 0.5; MDF valid for LED7707TR			

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 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	88ND*UK09BB6					
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	3.462	mg	supplier	die	Silicon (Si)	7440-21-3		3.258	mg	941075	74045
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	9243	727
Silicon die				supplier	metallization	Tungsten (W)	7440-33-7		0.051	mg	14731	1159
Silicon die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.008	mg	2311	182
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.075	mg	21664	1705
Silicon die				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.038	mg	10976	864
Leadframe	Copper and its alloy	23.21	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.279	mg	959888	506341
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.537	mg	23137	12205
Leadframe				supplier	alloy	Phosphorus (P)	12185-10-3		0.007	mg	302	159
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.027	mg	1163	614
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.351	mg	15123	7977
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.008	mg	345	182
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	43	23
Die attach	Other organic materials	0.774	mg	supplier	glue	Proprietary Acrylates	proprietary		0.101	mg	130491	2295
Die attach				supplier	glue	Silver (Ag)	7440-22-4		0.619	mg	799742	14068
Die attach				supplier	glue	Proprietary Bismaleimide	proprietary		0.023	mg	29716	523
Die attach				supplier	glue	Methacrylate ester	proprietary		0.023	mg	29716	523
Die attach				supplier	glue	Proprietary polymer	proprietary		0.008	mg	10336	182
Bonding wire	Other inorganic materials	0.405	mg	supplier	wire	Gold (Au)	7440-57-5		0.405	mg	1000000	9205
encapsulation	Other organic materials	16.149	mg	supplier	mold compound	Epoxy resin	proprietary		0.808	mg	50034	18364
encapsulation				supplier	mold compound	Silica fused (SiO2)	60676-86-0		14.373	mg	890024	326659
encapsulation				supplier	mold compound	Phenol Resin	proprietary		0.485	mg	30033	11023
encapsulation				supplier	mold compound	Metal hydroxide	proprietary		0.451	mg	27927	10250
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.032	mg	1982	727