



## 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>	2015-09-15
<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>	Giovanni Giacobello	<b>Representative Title</b>	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
	8N42*UR40AA6	A	Z7GA	2015-09-15
Amount	UoM	Unit type	ST ECOPACK Grade	
73.90	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	
QFP	5x5x1	32	gull wing	
Comment	Package: VFQFPN 5X5x1.0 32L PITCH 0.5; MDF valid for L6230Q; L6230QTR			

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-15th June 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	8N42*UR40AA6						
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Die	Other inorganic materials	7.139	mg	supplier	die	Silicon (Si)	7440-21-3		6.802	mg	952795	92043	
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.069	mg	9665	934	
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	140	14	
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1121	108	
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.02	mg	2802	271	
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.119	mg	16669	1610	
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	700	68	
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1961	189	
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	3642	352	
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	140	14	
Die				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.074	mg	10366	1001	
Leadframe	Copper & its alloys	19.902	mg	supplier	alloy	Copper (Cu)	7440-50-8		19.35	mg	972264	261840	
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.442	mg	22209	5981	
Leadframe				supplier	alloy	Phosphorus (P)	12185-10-3		0.007	mg	352	95	
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.027	mg	1357	365	
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.023	mg	3668	988	
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	100	27	
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	50	14	
Die attach	Other inorganic materials	4.762	mg	supplier	glue	Silver (Ag)	7440-22-4		3.809	mg	799874	51543	
Die attach				supplier	glue	methylene diacrylate	42594-17-2		0.286	mg	60059	3870	
Die attach				supplier	glue	methacrylate	7534-94-3		0.405	mg	85048	5480	
Die attach				supplier	glue	Urethane Methacrylate Resin	5888-33-5		0.238	mg	49979	3221	
Die attach				supplier	glue	Dicumyl peroxide	80-43-3		0.024	mg	5040	325	
Bonding wires	Precious metals	0.435	mg	supplier	wire	Gold (Au)	7440-57-5		0.435	mg	1000000	5886	
Encapsulation	Other Organic Materials	41.662	mg	supplier	mold compound	Silica, vitreous	60676-86-0		38.579	mg	926000	522043	
Encapsulation				supplier	mold compound	epoxy resin	85954-11-6		1.667	mg	40012	22558	
Encapsulation				supplier	mold compound	phenol resin	26834-02-6		1.25	mg	30003	16915	
Encapsulation				supplier	mold compound	carbon black	1333-86-4		0.166	mg	3984	2246	