



## Materials Declaration Form

<b>IPC Form Type *</b>	<b>1752</b> Distribute	<b>Version</b>	<b>2</b>
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2015-09-11</b>
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	IPD MD 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/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
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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
	MQ9Y*UI04AF5	A	Z6HA	2015-09-11
Amount	UoM	Unit type	ST ECOPACK Grade	
20.00	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	3x3x0.75	10	No lead	
Comment	Package: VFDFPN 10L 3x3x0.75 PITCH 0.5, MD valid for CP:STEF4SPUR.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-15th June 2015				
Query				Response
1 - Product(s) 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	MQ9Y*UI04AF5									
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	1.935	mg	supplier	die	Silicon (Si)	7440-21-3		1.813	mg	936951	90650				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.026	mg	13437	1300				
				supplier	metallization	Tungsten (W)	7440-33-7		0.020	mg	10336	1000				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	2584	250				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	22739	2200				
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.027	mg	13953	1350				
Leadframe	Copper & its alloys	9.226	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.913	mg	966074	445650				
				supplier	alloy	Iron (Fe)	7439-89-6		0.208	mg	22545	10400				
				supplier	alloy	Iron Phosphide(FeP)	26508-33-8		0.002	mg	217	100				
				supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	1192	550				
				supplier	metallization	Silver (Ag)	7440-22-4		0.092	mg	9972	4600				
				supplier	glue	Silver (Ag)	7440-22-4		0.125	mg	679348	6250				
	Other Organic Materials	0.184	mg	supplier	glue	methylene diacrylate	42594-17-2		0.046	mg	250000	2300				
				supplier	glue	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.006	mg	32609	300				
				supplier	glue	Polymer of Polybutadiene + Anhydride	Proprietary		0.006	mg	32609	300				
				supplier	glue	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.001	mg	5435	50				
				Bonding wires	Precious metals	0.119	mg	supplier	wire	Gold (Au)	7440-57-5		0.119	mg	1000000	5950
				Encapsulation	Other Organic Materials	8.040	mg	supplier	mold compound	Silica, vitreous	60676-86-0		7.534	mg	937065	376700
supplier	mold compound	epoxy resin	85954-11-6						0.241	mg	29975	12050				
supplier	mold compound	phenol resin	26834-02-6						0.241	mg	29975	12050				
supplier	mold compound	carbon black	1333-86-4						0.024	mg	2985	1200				
connections coating	Solder	0.496	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.496	mg	1000000	24800				