



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2013-04-11
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giuseppe Vitali Palma	Representative Title	AMS & IPD Materials Declaration Champion
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	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
	MY3I*UI64AA5	A	SA1A	2013-04-11
Amount	UoM	Unit type	ST ECOPACK Grade	
40.177	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	ium/Gold (Ni/Pd/Au) Tin/Bismuth (S	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	4X4X1.0	19	gull wing	
Comment	Package: VDFPN 4x4x1.0 8L PITCH 0.8			

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-19 December 2012				
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	MY31*UI64AA5					
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	2.107	mg		Silicon die	Silicon (Si)	7440-21-3		2.071	mg	982914	51547
Silicon die			mg		Silicon die	Gamma-butyrolactone	96-48-0		0.025	mg	11865	622
Silicon die			mg		Silicon die	Polyhydroxyamide	55295-98-2		0.011	mg	5221	274
Lead frame	Copper & its alloys	14.76	mg		Alloy	Copper	7440-50-8		14.218	mg	963279	353884
Lead frame			mg		Alloy	Iron (2.1-2.6%)	7439-89-6		0.333	mg	22561	8288
Lead frame			mg		Alloy	Iron Phosphide(FeP)	26508-33-8		0.004	mg	271	100
Lead frame			mg		Alloy	Zinc	7440-66-6		0.018	mg	1220	448
Lead frame			mg		Alloy	Nickel	7440-02-0		0.17	mg	11518	4231
Lead frame			mg		Alloy	Palladium	7440-05-3		0.015	mg	1016	373
Lead frame			mg		Alloy	Gold	7440-57-5		0.002	mg	136	50
Die attach	Other Organic Materials	0.34	mg		Glue	Silver	7440-22-4		0.274	mg	805882	6820
Die attach			mg		Glue	Carbocyclic Acrylate	Proprietary		0.034	mg	100000	846
Die attach			mg		Glue	Bismaleimide resin	Proprietary		0.01	mg	29412	249
Die attach			mg		Glue	2-preponoic acid, 2-methyl (1-10%)	68586-19-6		0.01	mg	29412	249
Die attach			mg		Glue	Additive	Proprietary		0.01	mg	29412	249
Die attach			mg		Glue	Dicumlyl peroxide (0.1 - 1.0)	80-43-3		0.002	mg	5882	50
Bonding wire	Precious metals	0.07	mg		Bonding wire	Gold (Au)	7440-57-5		0.07	mg	1000000	1742
Encapsulation	Other Organic Materials	22.9	mg		Molding compound	Silica fused	60676-86-0		21.457	mg	936987	534062
Encapsulation			mg		Molding compound	Epoxy resin	Proprietary		0.687	mg	30000	17099
Encapsulation			mg		Molding compound	Phenol resin	Proprietary		0.687	mg	30000	17099
Encapsulation			mg		Molding compound	Carbon black	1333-86-4		0.069	mg	3013	1717