



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 *	2013-03-12
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	Group MD CHAMPION (CSD 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
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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
	HYOF*0884AAJ	A	SA1A	2013-03-12
Amount	UoM	Unit type	ST ECOPACK Grade	
25.08	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 o	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	3X3X0.9	8	No lead	
Comment	Package: VFQFPN 3x3x0.9 1.7 16L			

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	HYOF*0884AAJ					
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	0.734	mg		Silicon die	Silicon (Si)	7440-21-3		0.734	mg	1000000	29270
Lead frame	Copper & its alloys	9.808	mg		Alloy	Copper	7440-50-8		9.475	mg	966048	377836
Lead frame			mg		Alloy	Iron	7439-89-6		0.221	mg	22533	8813
Lead frame			mg		Alloy	Phosphorus	7723-14-0		0.002	mg	204	80
Lead frame			mg		Alloy	Zinc	7440-66-6		0.012	mg	1223	479
Lead frame			mg		Alloy	Silver	7440-22-4		0.098	mg	9992	3908
Die attach	Other Organic Materials	0.11	mg		Glue	Silver	7440-22-4		0.089	mg	809091	3549
Die attach			mg		Glue	Carbocyclic Acrylate	Proprietary		0.011	mg	100000	439
Die attach			mg		Glue	Bismaleimide resin	Proprietary		0.003	mg	27273	120
Die attach			mg		Glue	2-preponoic acid, 2-methyl	68586-19-6		0.003	mg	27273	120
Die attach			mg		Glue	Additive (1~5%)	Proprietary		0.003	mg	27273	120
Die attach			mg		Glue	Dicumyl peroxide (0.1 - 1.0)	80-43-3		0.001	mg	9091	40
Bonding wire	Other inorganic materials	0.198	mg		Bonding wire	Copper	7440-50-8		0.198	mg	990000	7896
Bonding wire		0.002	mg		Bonding wire	Palladium	7440-05-3		0.002	mg	10000	80
Encapsulation	Other Organic Materials	14.115	mg		Molding compound	Silica fused	60676-86-0		13.227	mg	937088	527455
Encapsulation			mg		Molding compound	Epoxy resin	Proprietary		0.423	mg	29968	16868
Encapsulation			mg		Molding compound	Phenol resin	Proprietary		0.423	mg	29968	16868
Encapsulation			mg		Molding compound	Carbon black	1333-86-4		0.042	mg	2976	1675
Finishing	Other inorganic materials	0.11	mg		Connection coating	Sn	7440-31-5		0.11	mg	1000000	4386