



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 *	2013-08-29
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
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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
	HY94*UI87CK5	A	SA1A	2013-08-29
Amount	UoM	Unit type	ST ECOPACK Grade	
22.014	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	3X3X0.8	18	No lead	
Comment	Package: VFQFPN 16L 3x3x0,8 EXP.PAD 1,7			

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	HY94*UI87CK5					
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	1.289	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		1.274	mg	988363	57872
Silicon die				Supplier	Passivation	Gamma-butyrolactone	96-48-0		0.01	mg	7758	454
Silicon die				Supplier	Passivation	Polyhydroxyamide	55295-98-2		0.005	mg	3879	227
Lead frame	Copper and its alloy	9.329	mg	Supplier	Alloy	Copper	7440-50-8		9.012	mg	966020	409376
Lead frame				Supplier	Alloy	Iron	7439-89-6		0.21	mg	22510	9539
Lead frame				Supplier	Alloy	Phosphorus	7723-14-0		0.002	mg	214	91
Lead frame				Supplier	Alloy	Zinc	7440-66-6		0.012	mg	1286	545
Lead frame				Supplier	Alloy	Silver	7440-22-4		0.093	mg	9969	4225
Die attach	Other organic materials	0.239	mg	Supplier	Epoxy	Silver	7440-22-4		0.193	mg	807531	8767
Die attach				Supplier	Epoxy	Carbocyclic Acrylate	Proprietary		0.024	mg	100418	1090
Die attach				Supplier	Epoxy	Bismaleimide resin	Proprietary		0.007	mg	29289	318
Die attach				Supplier	Epoxy	2-preponic acid, 2-methyl	68586-19-6		0.007	mg	29289	318
Die attach				Supplier	Epoxy	Additive (1~5%)	Proprietary		0.007	mg	29289	318
Die attach				Supplier	Epoxy	Dicumyl peroxide (0.1 - 1.0)	80-43-3		0.001	mg	4184	45
Bonding wire	Other inorganic materials	0.14	mg	Supplier	Bonding wire	Copper	7440-50-8		0.139	mg	992857	6314
Bonding wire				Supplier	Bonding wire	Palladium	7440-05-3		0.001	mg	7143	45
Encapsulation	Other organic materials	10.527	mg	Supplier	Molding compound	Silica fused	60676-86-0		9.863	mg	936924	448033
Encapsulation				Supplier	Molding compound	Epoxy resin	Proprietary		0.316	mg	30018	14355
Encapsulation				Supplier	Molding compound	Phenol resin	Proprietary		0.316	mg	30018	14355
Encapsulation				Supplier	Molding compound	Carbon black	1333-86-4		0.032	mg	3040	1454
Finishing	Other inorganic materials	0.49	mg	Supplier	Connection coating	Sn	7440-31-5		0.49	mg	1000000	22259