



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-03-27
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
	MYYG*UQ91AA5	A	SA1A	2014-03-27
Amount	UoM	Unit type	ST ECOPACK Grade	
24.431	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	
DSO	3X3X0.95	8	gull wing	
Comment	Package: VFDFPN 6 3X3 0,95 PITCH			

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-16th December 2013				
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	MYYG*UQ91AAS					
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 Material	0.6	mg	Supplier	Silicon Die	Silicone (Si)	7440-21-3		0.568	mg	946667	23249
Silicon Die			mg	Supplier	Metallization	Aluminium (Al)	7429-90-5		0.007	mg	11667	287
Silicon Die			mg	Supplier	Metallization	Tungsten (W)	7440-33-7		0.006	mg	10000	246
Silicon Die			mg	Supplier	Passivation	Silicon Nitride (SiN)	68034-42-4		0.001	mg	1667	41
Silicon Die			mg	Supplier	Passivation	Silicon Oxide(SiO2)	7631-86-9		0.012	mg	20000	491
Silicon Die			mg	Supplier	Passivation	Gamma-butyrolactone	96-48-0		0.004	mg	6667	164
Silicon Die			mg	Supplier	Passivation	Polyhydroxyamide	55295-98-2		0.002	mg	3333	82
Leadframe	Copper and its alloy	9.03	mg	Supplier	Alloy	Copper (Remaining)	7440-50-8		8.722	mg	965891	357005
Leadframe			mg	Supplier	Alloy	Iron (2.1~2.6%)	7439-89-6		0.204	mg	22591	8350
Leadframe			mg	Supplier	Alloy	Lead (0.01max)	7439-92-1		0.001	mg	111	41
Leadframe			mg	Supplier	Alloy	Phosphorus (0.015~0.15%)	7723-14-0		0.002	mg	221	82
Leadframe			mg	Supplier	Alloy	Zinc (0.05~0.20%)	7440-66-6		0.011	mg	1218	450
Leadframe			mg	Supplier	Alloy	Silver (0.5~1.5%)	7440-22-4		0.09	mg	9967	3684
Die Attach	Other Organic Material	0.14	mg	Supplier	Glue	Silver (80 - 100%)	7440-22-4		0.113	mg	807143	4625
Die Attach			mg	Supplier	Glue	Carbocyclic Acrylates (10 -30%)	proprietary		0.014	mg	100000	573
Die Attach			mg	Supplier	Glue	Bismaleimide resin (1-10%)	proprietary		0.004	mg	28571	164
Die Attach			mg	Supplier	Glue	2-preponic acid, 2-methyl (1-10%)	68586-19-6		0.004	mg	28571	164
Die Attach			mg	Supplier	Glue	Additive (1-10%)	proprietary		0.004	mg	28571	164
Die Attach			mg	Supplier	Glue	Dicumyl peroxide (0.1 - 1.0)	80-43-3		0.001	mg	7143	41
Bonding wire	Other inorganic Material	0.19	mg	Supplier	Bonding Wire	Au	7440-57-5		0.19	mg	1000000	7777
Encapsulation	Other Organic Material	13.851	mg	Supplier	Molding Compound	Fused Silica (75-95)	60676-86-0		12.977	mg	936900	531169
Encapsulation			mg	Supplier	Molding Compound	Epoxy resin (1-5)	Trade Secret		0.416	mg	30034	17028
Encapsulation			mg	Supplier	Molding Compound	Phenol resin (1-5)	Trade Secret		0.416	mg	30034	17028
Encapsulation			mg	Supplier	Molding Compound	Carbon Black (0.1-0.5)	Trade Secret		0.042	mg	3032	1719
Finishing	Other Inorganic Material	0.62	mg	Supplier	Connection coating	Sn	7440-31-5		0.62	mg	1000000	25378