



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 *	2014-09-12
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 *	Antonella Lanzafame	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
	BYOF*0124BH6	A	SA1A	2014-09-12
Amount	UoM	Unit type	ST ECOPACK Grade	
25.00	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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	2.90,2.90,0.8	12	flat	
Comment	VFQFPN 3x3x0.9 1.7 16L; MD valid for CP: LM224QT.			

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 June 2014			
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	BYOF*0124BH6					
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	1.268	mg	supplier	Silicon die	Silicon (Si)	7440-21-3		1.268	mg	1000000	50720
Leadframe	Copper and its alloy	9.801	mg	Supplier	Alloy	Copper	7440-50-8		9.468	mg	966024	378720
Leadframe			mg	Supplier	Alloy	Iron	7439-89-6		0.221	mg	22549	8840
Leadframe			mg	Supplier	Alloy	Iron Phosphide (Fe2P)	1310-43-6		0.002	mg	204	80
Leadframe			mg	Supplier	Alloy	Zinc	7440-66-6		0.012	mg	1224	480
Leadframe			mg	Supplier	Alloy	Silver	7440-22-4		0.098	mg	9999	3920
Die Attach	Other Organic Material	0.03	mg	Supplier	Glue	Silver	7440-22-4		0.024	mg	800000	960
Die Attach			mg	Supplier	Glue	Carbocyclic Acrylates	proprietary		0.003	mg	100000	120
Die Attach			mg	Supplier	Glue	Bismaleimide resin	proprietary		0.001	mg	33333	40
Die Attach			mg	Supplier	Glue	2-preponoic acid, 2-methyl	68586-19-6		0.001	mg	33333	40
Die Attach			mg	Supplier	Glue	Additive	proprietary		0.001	mg	33333	40
Bonding Wire	Other Inorganic Material	0.2	mg	Supplier	Bonding Wire	Gold	7440-57-5		0.2	mg	1000000	8000
Encapsulation	Other Organic Material	13.591	mg	Supplier	Molding Compound	Silica Fused	60676-86-0		12.734	mg	936944	509360
Encapsulation			mg	Supplier	Molding Compound	Epoxy Resin	Proprietary		0.408	mg	30020	16320
Encapsulation			mg	Supplier	Molding Compound	Phenol Resin	Proprietary		0.408	mg	30020	16320
Encapsulation			mg	Supplier	Molding Compound	Carbon Black	1333-86-4		0.041	mg	3017	1640
Finishing	Other Inorganic Material	0.11	mg	Supplier	Connection coating	Sn	7440-31-5		0.11	mg	1000000	4400