



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 *	2013-01-08
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
STB120N4LF6	T2D2*6L4FA52	A	SH1A	2013-01-08
	Amount	UoM	Unit type	ECOPACK1/ROHS
		mg	Each	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	bright, annealed Tin/Silver/Bismuth	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	10.2X9.15X4.5	3	gull wing	
Comment	Package: D2PAK			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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)	true
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-18 June 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	T2D2*6L4FA52					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	5.468	mg	supplier	die	Silicon (Si)	7440-21-3		5.224	mg	955202	3640
				supplier	metallization	Aluminium (Al)	7429-90-5		0.129	mg	23587	90
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.06	mg	10971	42
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	549	2
						Gold (Au)	7440-57-5		0.01	mg	1828	7
Leadframe	Copper & its alloys	793.544	mg	supplier	alloy	Nickel (Ni)	7440-02-0		0.039	mg	7131	27
						Vanadium (V)	7440-62-2		0.003	mg	549	2
						Copper (Cu)	7440-50-8		792.51	mg	998700	552233
						Iron (Fe)	7439-89-6		0.794	mg	1001	553
						Iron Phosphide (FeP)	26508-33-8		0.238	mg	300	166
Die attach	Other organic materials	4.546	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.341	mg	954905	3025
						Silver (Ag)	7440-22-4		0.114	mg	25077	79
						Tin (Sn)	7440-31-5		0.091	mg	20018	63
Bonding wire	Other inorganic materials	4.482	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.46	mg	995091	3108
						Magnesium (Mg)	7439-95-4		0.022	mg	4909	15
						Silica, vitreous	60676-86-0		499.657	mg	799999	348169
encapsulation	Other organic materials	624.572	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		43.72	mg	70000	30465
						Phenol resin	9003-35-4		24.983	mg	40000	17409
						Biphenyl epoxy resin	85954-11-6		37.474	mg	59999	26112
						Antimony Trioxide	1309-64-4		7.495	mg	12000	5223
						Brominated Epoxy Resin	40039-93-8		9.369	mg	15001	6528
						Carbon black	1333-86-4		1.874	mg	3000	1306
						Tin (Sn)	7440-31-5		2.489	mg	1000000	1734
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1734