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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 *	2014-12-05
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
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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
	XLD2*EZ5LAD2	A	SH1A	2014-12-05
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK® 1	

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 o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.5	2	gull wing	
Comment	D2 D2PAK; MD valid for CP:STB21NK50Z.			

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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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	XLD2*EZSLAD2					
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	19.655	mg	supplier	die	Silicon (Si)	7440-21-3		18.988	mg	966065	13759
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.268	mg	13635	194
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.09	mg	4579	65
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.142	mg	7225	103
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	458	7
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.028	mg	1425	20
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.13	mg	6614	94
Leadframe	Copper & its alloys	779.748	mg	supplier	alloy	Copper (Cu)	7440-50-8		775.917	mg	995087	562259
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.357	mg	458	259
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.653	mg	837	473
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		2.804	mg	3596	2032
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.017	mg	22	12
Soft solder	Solder	9.799	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.358	mg	954995	6781
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.245	mg	25003	178
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.196	mg	20002	142
Bonding wire	Other inorganic materials	1.115	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.114	mg	999103	807
Bonding wire				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	897	1
encapsulation	Other Organic Materials	567.194	mg	supplier	mold compound	Silica, vitreous	60676-86-0		453.755	mg	800000	328808
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		39.704	mg	70001	28771
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		22.688	mg	40000	16441
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		34.032	mg	60001	24661
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		6.806	mg	11999	4932
encapsulation				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		8.508	mg	15000	6165
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.701	mg	2999	1233
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804