



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 *	2015-08-19
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 *	Giovanni Giacopello	Representative Title	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
	ACWB*YSB4A6A	A	ZS1A	2015-08-19
Amount	UoM	Unit type	ST ECOPACK Grade	
14.00	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.9,1.625,1.175	6	flat	
Comment	Package: SOT 23 - 6L; MDF valid for USBLC6-4SC6Y			

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-15th June 2015				
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	ACWB*YSB4A6A					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.75	mg	supplier	die	Silicon (Si)	7440-21-3		0.693	mg	924000	49500
Die				supplier	metallization	Aluminum (Al)	7429-90-5		0.011	mg	14667	786
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.003	mg	4000	214
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.006	mg	8000	429
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.001	mg	1333	71
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1333	71
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	6667	357
Die				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.03	mg	40000	2143
Leadframe	Copper and its alloy	6.129	mg	supplier	alloy	Copper(CU)	7440-50-8		5.826	mg	950563	416143
Leadframe				supplier	alloy	Iron(Fe)	7439-89-6		0.141	mg	23005	10071
Leadframe				supplier	alloy	Iron Phosphide(FeP)	26508-33-8		0.005	mg	816	357
Leadframe				supplier	alloy	Zinc(Zn)	7440-66-6		0.008	mg	1305	571
Leadframe				supplier	metallization	Silver(Ag)	7440-22-4		0.149	mg	24311	10643
Die attach	Other organic material	0.1	mg	supplier	glue	Silver(Ag)	7440-22-4		0.073	mg	730000	5214
Die attach				supplier	glue	Acrylate monomer	35325-39-4		0.015	mg	150000	1071
Die attach				supplier	glue	Acrylate oligomer	25068-38-6		0.008	mg	80000	571
Die attach				supplier	glue	Bismaleimide resin	Proprietary		0.003	mg	30000	214
Die attach				supplier	glue	Epoxy resin	Proprietary		0.001	mg	10000	71
Bonding wires	Other inorganic material	0.158	mg	supplier	wire	Gold (Au)	7440-57-5		0.158	mg	1000000	11286
Encapsulation	Other Organic Materials	6.669	mg	supplier	mold comp	Silica Fused	60676-86-0		5.782	mg	866997	413000
Encapsulation				supplier	mold comp	Epoxy Resin	25068-38-6		0.533	mg	79922	38071
Encapsulation				supplier	mold comp	Phenol Resin	29690-82-2		0.333	mg	49933	23786
Encapsulation				supplier	mold comp	Carbon Black	1333-86-4		0.021	mg	3149	1500
connections coating	Solder	0.194	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.194	mg	1000000	13857