



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 *	2014-12-15
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 *	Emilio Castelli	Representative Title	APG MD 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/web/en/support/support.html		


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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
L5963U-KBX	ARKB*UAE2AD1	A	MU1A	2014-12-15
Amount		UoM	Unit type	ST ECOPACK Grade
480.00		mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	10.3x7.5x2.3	36	Flat	
Comment				

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 '7a' exemption (other selected exemptions may apply)	true
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	ARKB*UAE2AD1					
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	10.189	mg	supplier	die	Silicon (Si)	7440-21-3		9.099	mg	893022	18956
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	2159	46
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.560	mg	54961	1167
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	98	2
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	589	13
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.032	mg	3141	67
Die				supplier	metallization	Nickel (Ni)	7440-02-0		0.070	mg	6870	146
Die				supplier	metallization	Platinum (Pt)	7440-06-4		0.039	mg	3828	81
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.018	mg	1767	38
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.140	mg	13740	292
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	491	10
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1374	29
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.040	mg	3926	83
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	294	6
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.140	mg	13740	292
Leadframe	Copper & its alloys	215.378	mg	supplier	alloy	Copper (Cu)	7440-50-8		208.412	mg	967657	434192
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		4.902	mg	22760	10213
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.295	mg	1370	615
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.257	mg	1193	535
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.512	mg	7020	3150
Die attach		6.545	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.382	mg	975095	13296
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.098	mg	14973	204
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.065	mg	9931	135
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		2.267	mg	1000000	4723
encapsulation		240.273	mg	supplier	mold compound	Phenol Resin	205830-20-2		9.611	mg	40000	20023
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		7.208	mg	29999	15017
encapsulation				#N/A	mold compound	epoxy resin	na		7.208	mg	29999	15017
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.481	mg	2002	1002
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		215.765	mg	897999	449510
connections coating	Solder	5.349	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		5.349	mg	1000000	11144