



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 *	2014-04-24
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 *	Andrea Casali	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/online_tech_support.html		

Uncertainty Statement


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
L5959	K8V2*UH35BF6	A	64BA	2014-04-24
Amount	UoM	Unit type	ST ECOPACK Grade	
5600.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	20x10.7x4.5	15	Through-hole	
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 December 2013				
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	K8V2*UH35BF6					
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	12.876	mg	supplier	die	Silicon (Si)	7440-21-3		12.310	mg	956042	2198
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.105	mg	8155	19
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.105	mg	8155	19
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.011	mg	854	2
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.021	mg	1631	4
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.227	mg	17630	41
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	544	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	1476	3
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.063	mg	4893	11
die (s)				supplier	polymer die coating	Polymer resist (Black resist)	Proprietary		0.008	mg	621	1
Leadframe	Copper & its alloys	4428.174	mg	supplier	alloy	Copper (Cu)	7440-50-8		4399.419	mg	993506	785611
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.026	mg	458	362
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		3.700	mg	836	661
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		18.690	mg	4221	3338
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		4.339	mg	980	775
Die attach		8.231	mg	JIG R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high me	8.026	mg	975094	1433
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.123	mg	14944	22
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.082	mg	9962	15
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		1.084	mg	1000000	194
encapsulation		1120.208	mg	supplier	mold compound	Silica, vitreous	60676-86-0		803.188	mg	716999	143426
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		190.435	mg	170000	34006
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		80.655	mg	72000	14403
encapsulation				JIG I	mold compound	Brominated epoxy resin	40039-93-8		16.803	mg	15000	3001
encapsulation				supplier	mold compound	Bismuth	7440-69-9		3.361	mg	3000	600
encapsulation				supplier	mold compound	Carbon black	1333-86-4		3.361	mg	3000	600
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		22.405	mg	20001	4001
connections coating	Solder	29.426	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		29.426	mg	1000000	5255