



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 *	2014-04-18
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/online_tech_support.html		

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
FDA4100LV	MAT)*UJ13CFA	A	MU1A	2014-04-18
Amount	UoM	Unit type	ST ECOPACK Grade	
3390.20	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	el/Palladium/Gold (Ni/Pd/Au), EN	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	14x20x2.7	92	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 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	MATJ*UJ13CFA					
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	22.930	mg	supplier	die	Silicon (Si)	7440-21-3		21.711	mg	946838	6404
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.223	mg	9725	66
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.223	mg	9725	66
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.136	mg	5931	40
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.047	mg	2050	14
die (s)				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.381	mg	16616	112
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.017	mg	741	5
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.044	mg	1919	13
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.148	mg	6454	44
Leadframe	Copper & its alloys	2468.515	mg	supplier	alloy	Copper (Cu)	7440-50-8		2452.302	mg	993432	723350
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.228	mg	497	362
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		1.964	mg	796	579
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.593	mg	645	470
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.065	mg	26	19
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.054	mg	22	16
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		11.309	mg	4581	3336
Die attach		14.421	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	14.061	mg	975036	4148
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.216	mg	14978	64
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.144	mg	9985	42
Bonding wire		14.244		supplier	wire	Gold (Au)	7440-57-5		14.244	mg	1000000	4202
encapsulation		870.091	mg	supplier	mold compound	Biphenyl epoxy resin	85954-11-6		65.257	mg	75000	19249
encapsulation				supplier	mold compound	Phenol resin Novolak	26834-02-6		34.804	mg	40000	10266
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		760.459	mg	873999	224311
encapsulation				supplier	mold compound	Carbon-black	1333-86-4		4.350	mg	4999	1283
encapsulation				JIG Table B	mold compound	Bismuth (Bi)	7440-69-9		5.221	mg	6001	1540