



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 *	2015-09-08
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 *	Rossana Bonaccorso	Representative Title	IPD 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		

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
L4973V5.1	A5D7*U540DA6	A	MU1A	2015-09-08
Amount		UoM	Unit type	ST ECOPACK Grade
1498.00		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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
DIP	24.38 - 6.35 - 3.3	18	Through-hole
Comment	Package: PDIP 18 .3 Cu 0.4		

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	ASD7*U540DA6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	11.784	mg	supplier	die	Silicon (Si)	7440-21-3		11.355	mg	963595	7580
				supplier	metallization	Aluminium (Al)	7429-90-5		0.065	mg	5516	43
				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.036	mg	3055	24
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.153	mg	12984	102
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	594	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.017	mg	1443	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.058	mg	4922	39
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.093	mg	7892	62
				Leadframe	Copper & its alloys	706.322	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.706	mg	1000	471
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.212	mg	300	142
supplier	metallization	Silver (Ag)	7440-22-4						0.325	mg	460	217
supplier	solder	Lead (Pb)	7439-92-1					7a-Lead in high me	7.522	mg	974984	5021
Soft solder	Solder	7.715	mg	supplier	solder	Silver (Ag)	7440-22-4		0.116	mg	15036	77
				supplier	solder	Tin (Sn)	7440-31-5		0.077	mg	9981	51
				supplier	wire	Gold (Au)	7440-57-5		2.203	mg	1000000	1471
Encapsulation	Other inorganic materials	768.536	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		103.752	mg	135000	69260
				supplier	mold compound	Phenol resin	9003-35-4		42.270	mg	55001	28218
				supplier	mold compound	Tetrabromobisphenol	79-94-7		19.213	mg	24999	12826
				supplier	mold compound	Antimony Trioxide	1309-64-4		2.306	mg	3001	1539
				supplier	mold compound	Antimony pentoxide	1314-60-9		9.223	mg	12001	6157
				supplier	mold compound	carbon black	1333-86-4		3.843	mg	5000	2565
				#N/A	mold compound	Mixed siloxanes	Proprietary		11.528	mg	15000	7696
				supplier	mold compound	Acrylic resin	9003-01-4		15.370	mg	19999	10260
				supplier	mold compound	Silica, vitreous	60676-86-0		553.345	mg	719999	369389
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.843	mg	5000	2565
supplier	mold compound	Quartz	14808-60-7		3.843	mg	5000	2565				
Connections coating	Solder	1.440	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.440	mg	1000000	961