



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	11/24/2014
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 *	Giuseppe Vitali Palma	Representative Title	AMS & 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
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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
	MB61*UM85AC5	A	ZY1A	11/24/2014
	Amount	UoM	Unit type	ST ECOPACK Grade
	79.520	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85X3.9X1.52	19	gull wing	
Comment	Package: HSOP 8L .150" PITCH 1.27 EXPOPAD; MD valid for ST1S10PHR			

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-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	MB61*UM85AC5					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
SILICON DIE	Other inorganic materials	2.722	mg	supplier	DIE	Silicon (Si)	7440-21-3		2.578	mg	947098	32420
SILICON DIE				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	9919	340
SILICON DIE				supplier	metallization	Tungsten (W)	7440-33-7		0.021	mg	7715	264
SILICON DIE				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.006	mg	2204	75
SILICON DIE				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.045	mg	16532	566
SILICON DIE				supplier	passivation	Gamma-butyrolactone	96-48-0		0.015	mg	5511	189
SILICON DIE				supplier	passivation	Polyhydroxyamide	55295-98-2		0.007	mg	2572	88
SILICON DIE				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	735	25
SILICON DIE				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1837	63
SILICON DIE				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.015	mg	5511	189
SILICON DIE				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	367	13
LEADFRAME	Copper and its alloy	32.064	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		30.701	mg	957491	386079
LEADFRAME				supplier	ALLOY	Iron (Fe)	7439-89-6		0.754	mg	23515	9482
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.038	mg	1185	478
LEADFRAME				supplier	ALLOY	Phosphorus (P)	7723-14-0		0.01	mg	312	126
LEADFRAME				supplier	COATING	Silver(Ag)	7440-22-4		0.561	mg	17496	7055
DIE ATTACH	Other organic materials	0.755	mg	supplier	GLUE	Bisphenol F type epoxy resin	9003-36-5		0.053	mg	70199	666
DIE ATTACH				supplier	GLUE	Epoxy resin	68475-94-5		0.03	mg	39735	377
DIE ATTACH				supplier	GLUE	Silver(Ag)	7440-22-4		0.582	mg	770861	7319
DIE ATTACH				supplier	GLUE	Gamma Butyrolactone	96-48-0		0.03	mg	39735	377
DIE ATTACH				supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.03	mg	39735	377
DIE ATTACH				supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	EC 417-470-1		0.03	mg	39735	377
BONDING WIRE	Other inorganic materials	0.264	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.264	mg	1000000	3320
ENCAPSULATION	Other inorganic materials	42.351	mg	supplier	MOLDING COMPOUND	Biphenyl epoxy resin	85954-11-6		3.145	mg	74260	39550
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		36.06	mg	851456	453471
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	26834-02-6		1.677	mg	39598	21089
ENCAPSULATION				supplier	MOLDING COMPOUND	Epoxy Cresol Novolac	29690-82-2		0.839	mg	19811	10551
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.21	mg	4959	2641
ENCAPSULATION				supplier	MOLDING COMPOUND	Bismuth (Bi)	7440-69-9		0.42	mg	9917	5282
FINISHING - (ST380 -Sn)	Other inorganic materials	1.364	mg	supplier	CONNECTION COATING	Tin (Sn)	7440-31-5		1.364	mg	1000000	17153