



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 *	2014-05-16
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

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
	A561*UA50BAA	A	ZY1A	2014-05-16
Amount	UoM	Unit type	ST ECOPACK Grade	
79.612	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	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	4.85X3.9X1.52	10	gull wing	
Comment	Package: HSOP 8L .150" PITCH 1.27 EXPOPAD; MD valid also for A7985A			

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 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	A561*UA50BAA					
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	2.068	mg	supplier	DIE	Silicon (Si)	7440-21-3		1.976	mg	955513	24820
SILICON DIE			mg	supplier	metallization	Aluminium (Al)	7429-90-5		0.02	mg	9671	251
SILICON DIE			mg	supplier	metallization	Tungsten (W)	7440-33-7		0.016	mg	7737	201
SILICON DIE			mg	supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	1934	50
SILICON DIE			mg	supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.035	mg	16925	440
SILICON DIE			mg	supplier	passivation	Gamma-butyrolactone	96-48-0		0.012	mg	5803	151
SILICON DIE			mg	supplier	passivation	Polyhydroxyamide	55295-98-2		0.005	mg	2418	63
LEADFRAME	Copper and its alloy	32.628	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		31.265	mg	958226	392717
LEADFRAME			mg	supplier	ALLOY	Iron (Fe)	7439-89-6		0.754	mg	23109	9471
LEADFRAME			mg	supplier	ALLOY	Zinc (Zn)	7440-66-6		0.038	mg	1165	477
LEADFRAME			mg	supplier	ALLOY	Phosphorus (P)	7723-14-0		0.01	mg	306	126
LEADFRAME			mg	supplier	COATING	Silver(Ag)	7440-22-4		0.561	mg	17194	7047
DIE ATTACH	Other organic materials	0.65	mg	supplier	GLUE	Epoxy resin A	9003-36-5		0.0458	mg	70462	575
DIE ATTACH			mg	supplier	GLUE	Epoxy resin B	68475-94-5		0.026	mg	40000	327
DIE ATTACH			mg	supplier	GLUE	Silver(Ag)	7440-22-4		0.5002	mg	769538	6283
DIE ATTACH			mg	supplier	GLUE	Lactone	96-48-0		0.026	mg	40000	327
DIE ATTACH			mg	supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.026	mg	40000	327
DIE ATTACH			mg	supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.026	mg	40000	327
BONDING WIRE	Other inorganic materials	0.223	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.223	mg	1000000	2801
ENCAPSULATION	Other organic materials	42.679	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		3.201	mg	75002	40208
ENCAPSULATION			mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		36.704	mg	860001	461036
ENCAPSULATION			mg	supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		1.707	mg	39996	21441
ENCAPSULATION			mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.213	mg	4991	2675
ENCAPSULATION			mg	supplier	MOLDING COMPOUND	Epoxy, Cresol Novolac	29690-82-2		0.854	mg	20010	10727
FINISHING	Other inorganic materials	1.364	mg	supplier	CONNECTION COATING	Tin (Sn)	7440-31-5		1.364	mg	1000000	17133