



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 *	12/03/2014
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
	C5Y9*UQ36BA1	A	ZY1A	12/03/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
116.800	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	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	9.7X4.4X0.9	34	gull wing	
Comment	Package: HTSSOP28 BODY4.4 PITCH0.65 EXPAD; MD valid for L6470HTR, L6470H			

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	CSY9*UQ368A1					
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	6.966	mg	supplier	DIE	Silicon (Si)	7440-21-3		6.594	mg	946598	56455
SILICON DIE				supplier	metallization	Aluminium (Al)	7429-90-5		0.068	mg	9762	582
SILICON DIE				supplier	metallization	Tungsten (W)	7440-33-7		0.054	mg	7752	462
SILICON DIE				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.014	mg	2010	120
SILICON DIE				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.116	mg	16652	993
SILICON DIE				supplier	passivation	Gamma-butyrolactone	96-48-0		0.038	mg	5455	325
SILICON DIE				supplier	passivation	Polyhydroxyamide	55295-98-2		0.017	mg	2440	146
SILICON DIE				supplier	passivation	Alcoxysilane	proprietary		0.001	mg	144	9
SILICON DIE				supplier	passivation	Aryl Siliclic Acid	proprietary		0.001	mg	144	9
SILICON DIE				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	718	43
SILICON DIE				supplier	back side metallization	Gold (Au)	7440-57-5		0.013	mg	1866	111
SILICON DIE				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.045	mg	8460	385
LEADFRAME	Copper and its alloy	50.013	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		47.871	mg	957171	409854
LEADFRAME				supplier	ALLOY	Iron (Fe)	7439-89-6		1.156	mg	23114	9897
LEADFRAME				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.059	mg	1180	505
LEADFRAME				supplier	ALLOY	Phosphorus (P)	12185-10-3		0.015	mg	300	128
LEADFRAME				supplier	COATING	Silver(Ag)	7440-22-4		0.912	mg	18235	7808
DIE ATTACH	Other organic materials	1.446	mg	supplier	GLUE	Bisphenol F type epoxy resin	9003-36-5		0.101	mg	89848	865
DIE ATTACH				supplier	GLUE	Epoxy resin	68475-94-5		0.058	mg	40111	497
DIE ATTACH				supplier	GLUE	Silver(Ag)	7440-22-4		1.113	mg	769710	9529
DIE ATTACH				supplier	GLUE	Gamma Butyrolactone	96-48-0		0.058	mg	40111	497
DIE ATTACH				supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.058	mg	40111	497
DIE ATTACH				supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	EC 417-470-1		0.058	mg	40111	497
BONDING WIRE	Other inorganic materials	0.77	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.77	mg	1000000	6592
ENCAPSULATION	Other inorganic materials	54.881	mg	supplier	MOLDING COMPOUND	Epoxy Resin	proprietary		4.939	mg	89995	42286
ENCAPSULATION				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		46.101	mg	840017	394700
ENCAPSULATION				supplier	MOLDING COMPOUND	Phenol Resin	proprietary		3.567	mg	84995	30539
ENCAPSULATION				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.274	mg	4993	2346
FINISHING	Other inorganic materials	2.724	mg	supplier	CONNECTION COATING	Tin (Sn)	7440-31-5		2.724	mg	1000000	23322