

Materials Declaration Form

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

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2014-01-16					
Contact Name *	Refer to " Supplier Comment" section	to "Supplier Comment" section Contact Title Refer to "Supplier Comment" section						
Contact Phone *	Refer to " Supplier Comment" section	fer to "Supplier Comment" section Contact Email * Refer to "Supplier Comment" section						
Authorized Representative *	Antonella Lanzafame	Representative Title	AMS & IPD Materials Declaration Champion					
Representative Phone *	Refer to " Supplier Comment" section	efer to " Supplier Comment" section Representative Email * Refer to " Supplier Comment" section						
Supplier Comment	Online Technical Support - STMicroele	com/support/online_tech_support.jsp						

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 omprehensive 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 Da								
	HNZJ*G38G81B	А	ZA41	2014-01-16				
	Amount	UoM	Unit type	ST ECOPACK Grade				
	98.00	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	life.augmented
Not Applicable; if coating is used o	Tin (Sn), matte	Copper Alloy		meraagmemea

Package Designator	Size	Nbr of instances	Shape			
SOJ	4.50X2.16X3.68	1	J bend			
Comment	SMB CLIP (SOD 6 NEW); MD valid for CP: STTH3L06U.					

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	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)							
Product(s) meets EU RoHS requirements	Product(s) meets EU RoHS requirements by application of the selected exemption(s) true							
Product(s) does not meet EU RoHS requ	rements and is not under exemptions	false						
Product(s) is obsolete, no information is	available	false						
Product(s) is unknown, no information is available								
Exemption Id.	d. Description							
7a	7a Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)							

QueryList: REACH-16th December 2013								
Query								
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH								
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application								

Material Composition Declaration					Mfr Item Name	HNZJ*G	38G81B					
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	1.721	mg	supplier	Die	Silicon (Si)	7440-21-3		1.669	mg	969785	17031
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.01	mg	5811	102
Silicon die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1743	31
Silicon die				supplier	metallization	Nickel (Ni)	7440-02-0		0.007	mg	4067	71
Silicon die				supplier	metallization	Gold (Au)	7440-57-5		0.004	mg	2324	41
Silicon die				supplier	backside metallization	Titanium (Ti)	7440-32-6		0.001	mg	581	10
Silicon die				supplier	backside metallization	Gold (Au)	7440-57-5		0.002	mg	1162	20
Silicon die				supplier	backside metallization	Nickel (Ni)	7440-02-0		0.011	mg	6392	112
Silicon die				supplier	passivation	Gamma-butyrolactone	96-48-0		0.01	mg	5811	102
Silicon die				supplier	passivation	Polyhydroxyamide	55295-98-2		0.004	mg	2324	41
Leadframe + Clip	Copper and its alloy	40.478	mg	Supplier	Alloy	Cu	7440-50-8		40.458	mg	999506	412837
Leadframe + Clip				Supplier	Alloy	Zn	7440-66-6		0.002	mg	49	20
Leadframe + Clip				Supplier	Alloy	Fe	7439-89-6		0.004	mg	99	41
Leadframe + Clip				Supplier	Alloy	Iron Phosphide(FeP)	26508-33-8		0.014	mg	346	143
Die attach	Other organic material	2.299	mg	Supplier	soft solder	Ag	7440-22-4		0.058	mg	25228	592
Die attach				Supplier	soft solder	Sn	7440-31-5		0.114	mg	49587	1163
Die attach				JIG R	soft solder	Lead	7439-92-1	7a-Lead in high me	2.127	mg	925185	21704
Encapsulation	Other organic material	52.572	mg	Supplier	Molding Compound	silica fused	7631-86-9		38.903	mg	739995	396969
Encapsulation				Supplier	Molding Compound	silica quartz	14808-60-7		10.514	mg	199992	107286
Encapsulation				Supplier	Molding Compound	phenolic resin	9003-35-4		2.629	mg	50008	26827
Encapsulation				Supplier	Molding Compound	carbon black	1333-86-4		0.526	mg	10005	5367
Finishing	Other inorganic material	0.93	mg	Supplier	connection coating	Sn	7440-31-5		0.93	mg	1000000	9490