



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 *	2014-04-09
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 *	Giovanni Giacopello	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
	HNZJ*F62G81B	A	ZA41	2014-04-09
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	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOJ	4.54 - 3.68 - 2.1	2	J bend	
Comment	Package: SMB CLIP (SOD 6 NEW); MDF valid for STTH1L06U			

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
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				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	HNZJ *F62G81B					
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	0.852	mg	supplier	die	Silicon (Si)	7440-21-3		0.808	mg	948357	8245
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.02	mg	23474	204
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.011	mg	12911	112
Die Attach				supplier	passivation	Gamma-butyrolactone	96-48-0		0.005	mg	5869	51
Die Attach				supplier	passivation	Polyhydroxyamide	55295-98-2		0.002	mg	2347	20
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	1174	10
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	5869	51
Lead frame & clips	Other inorganic materials	40.474	mg	supplier	Alloy	Copper (Cu)	7440-50-8		40.454	mg	999506	412796
Lead frame & clips				supplier	Alloy	Iron (Fe)	7439-89-6		0.002	mg	49	20
Lead frame & clips				supplier	Alloy	Zinc	7440-66-6		0.004	mg	99	41
Lead frame & clips				supplier	Alloy	Phosphorus (P)	12185-10-3		0.014	mg	346	143
Soft solder	Solder	2.299	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.127	mg	925185	21704
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.058	mg	25228	592
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.114	mg	49587	1163
encapsulation	Other inorganic materials	53.349	mg	supplier	mold compound	silica fused	7631-86-9		39.478	mg	739995	402837
encapsulation				supplier	mold compound	silica quartz	14808-60-7		10.67	mg	200004	108878
encapsulation				supplier	mold compound	phenolic resin	9003-35-4		2.667	mg	49992	27214
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.534	mg	10010	5449
Finishing	Solder	1.026	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.026	mg	1000000	10469