



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 *	2014-07-11
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

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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
	HLLV*G83B11P	A	LGGA	2014-07-11
Amount	UoM	Unit type	ST ECOPACK Grade	
4400.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	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	
SIP	15.75,20.15,5.15	2	Through-hole	
Comment	Package: DO 247; MDF valid for STTH6006W			

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 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)	true
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	HLV*G83B11P					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	30.087	mg	supplier	die	Silicon (Si)	7440-21-3		29.221	mg	971217	6641
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.508	mg	16884	115
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.119	mg	3955	27
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.053	mg	1762	12
die (s)				supplier	passivation	Alcoxsilane	proprietary		0.004	mg	133	1
die (s)				supplier	passivation	Aryl Silicic Acid	proprietary		0.002	mg	66	0
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.01	mg	332	2
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.03	mg	997	7
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.14	mg	4653	32
Leadframe	Copper & Its alloys	2699.813	mg	supplier	alloy	Copper (Cu)	7440-50-8		2695.317	mg	998335	612572
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.241	mg	460	282
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.267	mg	840	515
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.914	mg	339	208
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Solder	16.307	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	15.573	mg	954989	3539
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.408	mg	25020	93
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.326	mg	19991	74
Bonding wire	Other inorganic materials	5.746	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.746	mg	1000000	1306
encapsulation	Other Organic Materials	1641.85	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1428.409	mg	870000	324638
encapsulation				supplier	mold compound	Epoxy resin	proprietary		164.185	mg	100000	37315
encapsulation				supplier	mold compound	Phenol resin	proprietary		41.047	mg	25000	9329
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		8.209	mg	5000	1866
connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408