



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 *	2015-07-26
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 *	Emilio Castelli	Representative Title	APG MD 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/web/en/support/online_tech_support.html		

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
STPA001AH	H8QL*UI11BA1	A	SH1A	2015-07-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	7800.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), bright, reflowed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMO	15.7x29.23x4.5	27	NAC	
Comment				

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 '7a' exemption (other selected exemptions may apply)	true
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	H8QL*UI118A1					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	14.970	mg	supplier	die	Silicon (Si)	7440-21-3		14.164	mg	946159	1816
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.109	mg	7281	14
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.086	mg	5745	11
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.023	mg	1536	3
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.186	mg	12425	24
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.008	mg	534	1
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.022	mg	1470	3
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.072	mg	4810	9
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.186	mg	12425	24
Die				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.114	mg	7615	15
Leadframe	Copper & its alloys	5214.977	mg	supplier	alloy	Copper (Cu)	7440-50-8		5205.177	mg	998121	667330
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.397	mg	460	307
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.378	mg	840	561
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.025	mg	580	388
Die attach		9.213	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.983	mg	975035	1152
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.138	mg	14979	18
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.092	mg	9986	12
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		4.682	mg	1000000	600
encapsulation		2517.573	mg	supplier	mold compound	Amorphous Silica	7631-86-9		2139.937	mg	850000	274351
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		151.054	mg	60000	19366
encapsulation				#N/A	mold compound	epoxy resin	na		100.703	mg	40000	12911
encapsulation				#N/A	mold compound	Phenol resin	na		100.703	mg	40000	12911
encapsulation				supplier	mold compound	Carbon black	1333-86-4		17.623	mg	7000	2259
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		7.553	mg	3000	968
connections coating	Solder	38.585	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		38.585	mg	1000000	4947