



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 *	2014-10-31
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/support.html		

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 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
STPA003OD-4WX	H84W*U1A5AB1	A	SH1A	2014-10-31
Amount	UoM	Unit type	ST ECOPACK Grade	
7300.00	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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMD	29.23x15.7x4.5	25	flat	
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	H84W*U1A5AB1					
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	16.823	mg	supplier	die	Silicon (Si)	7440-21-3		15.639	mg	929620	2142
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.161	mg	9570	22
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.128	mg	7609	18
Die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.034	mg	2021	5
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.275	mg	16347	38
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.012	mg	713	2
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.032	mg	1902	4
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.092	mg	5469	13
Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.007	mg	416	1
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.275	mg	16347	38
Die				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.168	mg	9986	23
Leadframe	Copper & its alloys	5239.438	mg	supplier	alloy	Copper (Cu)	7440-50-8		5214.419	mg	995225	714304
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.402	mg	458	329
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.386	mg	837	601
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		16.900	mg	3226	2315
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.331	mg	254	182
Die attach		10.762	mg	JIG - R	Soft solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	10.493	mg	975005	1437
Die attach				supplier	Soft solder	Silver (Ag)	7440-22-4		0.161	mg	14960	22
Die attach				supplier	Soft solder	Tin (Sn)	7440-31-5		0.108	mg	10035	15
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		4.141	mg	1000000	567
encapsulation		1988.343	mg	supplier	mold compound	Amorphous Silica	7631-86-9		1690.092	mg	850000	231519
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		119.300	mg	60000	16342
encapsulation				#N/A	mold compound	epoxy resin	na		79.534	mg	40000	10895
encapsulation				#N/A	mold compound	Phenol resin	na		79.534	mg	40000	10895
encapsulation				supplier	mold compound	Carbon black	1333-86-4		13.918	mg	7000	1907
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		5.965	mg	3000	817
connections coating	Solder	40.493	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		40.493	mg	1000000	5547