



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 *	2014-08-12
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 *	Giuseppe Vitali Palma	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
	HSLW*Z14P02V	A	SH1A	2014-08-12
Amount	UoM	Unit type	ST ECOPACK Grade	
4430.00	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		
	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75X20.15X5.15	4	Through-hole	
Comment	Package: TO 247; MD valid for STPS61H100CW' STPS40H100CW			

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 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	HSLW*Z14P02V					
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	24.114	mg	supplier	die	Silicon (Si)	7440-21-3		22.681	mg	940574	5120
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.939	mg	38940	212
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.021	mg	871	5
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.034	mg	1410	8
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.102	mg	4230	23
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.138	mg	5723	31
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.011	mg	456	2
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.033	mg	1368	7
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.155	mg	6428	35
Leadframe	Copper & Its alloys	2744.11	mg	supplier	alloy	Copper (Cu)	7440-50-8		2728.516	mg	994317	615918
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.257	mg	458	284
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.295	mg	836	518
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4361	2702
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Other Organic Materials	14.828	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	14.16	mg	954950	3196
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.371	mg	25020	84
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.297	mg	20030	67
Bonding wire	Other inorganic materials	9.194	mg	supplier	wire	Aluminium (Al)	7429-90-5		9.194	mg	1000000	2075
encapsulation	Other Organic Materials	1631.557	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1419.454	mg	870000	320419
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		163.156	mg	100000	36830
encapsulation				supplier	mold compound	Phenol resin	Proprietary		40.789	mg	25000	9207
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		8.158	mg	5000	1842
connections coating	Other inorganic materials	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399