



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2014-11-21
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/web/en/support/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
	HSLW*Z04P029	A	SH1A	2014-11-21
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	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75X20.15X5.15	3	Through-hole	
Comment	Package: TO 247; MDF valid for STPS30150CW; STPS30170CW; STPS30175CW-SIE			

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*Z04P029					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	10.467	mg	supplier	die	Silicon (Si)	7440-21-3		10.138	mg	968568	2288
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.063	mg	6019	14
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	860	2
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.015	mg	1433	3
Die or Dies				supplier	metallization	Nickel (Ni)	7440-02-0		0.046	mg	4395	10
Die or Dies				supplier	metallization	Gold (Au)	7440-57-5		0.045	mg	4299	10
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.062	mg	5923	14
Die or Dies				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	478	1
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.015	mg	1433	3
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.069	mg	6592	16
Leadframe	Copper & its alloys	2719.666	mg	supplier	alloy	Copper (Cu)	7440-50-8		2704.104	mg	994278	610407
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.246	mg	458	281
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.274	mg	836	513
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4401	2702
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Solder	7.328	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.998	mg	954967	1580
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.183	mg	24973	41
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.147	mg	20060	33
Bonding wire	Other inorganic materials	5.691	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.691	mg	1000000	1285
encapsulation	Other inorganic materials	1680.651	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1360.156	mg	809303	307033
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		156.339	mg	93023	35291
encapsulation				supplier	mold compound	Phenol resin	Proprietary		156.339	mg	93023	35291
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		7.817	mg	4651	1765
connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399