



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 *	2013-04-03
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
STPS20H100CG	7SD2*Z01P02V	A	SH1A	2013-04-03
Amount		UoM	Unit type	ST ECOPACK Grade
1380.00		mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	245	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	10.20,9.15,4.5	2	gull wing	
Comment	Package: D2PAK			

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-19 Dec 2012				
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	7SD2*201P02V					
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	10.155	mg	supplier	die	Silicon (Si)	7440-21-3		9.607	mg	946036	6962
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.399	mg	39291	289
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	492	4
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.059	mg	5810	43
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	492	4
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1379	10
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.066	mg	6499	48
Leadframe	Copper & its alloys	776.782	mg	supplier	alloy	Copper (Cu)	7440-50-8		774.755	mg	997391	561417
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.357	mg	460	259
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.652	mg	839	472
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.012	mg	1303	733
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
Soft solder	Solder	7.017	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.702	mg	955109	4857
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.175	mg	24939	127
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.14	mg	19952	101
Bonding wire	Other inorganic materials	8.099	mg	supplier	wire	Aluminium (Al)	7429-90-5		8.099	mg	1000000	5869
encapsulation	Other Organic Materials	575.458	mg	supplier	mold compound	Silica, vitreous	60676-86-0		460.366	mg	799999	333599
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		40.282	mg	70000	29190
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		23.019	mg	40001	16680
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		34.527	mg	59999	25020
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		6.905	mg	11999	5004
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		8.632	mg	15000	6255
encapsulation				supplier	mold compound	Carbon black	1333-86-4		1.727	mg	3001	1251
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804