



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 *	2014-10-28
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 *	Antonella Lanzafame	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
	HWDP*Z51S11Y	A	Z4XA	2014-10-28
Amount	UoM	MB61*UM85ACF	ST ECOPACK Grade	
320.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	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	6.5 - 6.1 - 2.3	3	Through-hole	
Comment	TO 252 DPAK; MD valid for CP:STPS340B-TR.			

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	HWD P*Z51511Y					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
SILICON DIE	Other inorganic materials	1.175	mg	supplier	DIE	Silicon (Si)	7440-21-3		1.101	mg	6759	3441
SILICON DIE				supplier	METALLIZATION	Aluminium (Al)	7429-90-5		0.046	mg	282	144
SILICON DIE				supplier	METALLIZATION	Titanium (Ti)	7440-32-6		0.001	mg	6	3
SILICON DIE				supplier	METALLIZATION	Nickel (Ni)	7440-02-0		0.001	mg	6	3
SILICON DIE				supplier	PASSIVATION	Silicon Oxide(SiO2)	7631-86-9		0.007	mg	43	22
SILICON DIE				supplier	PASSIVATION	Esterified polyamid	63428-83-1		0.007	mg	43	22
SILICON DIE				supplier	PASSIVATION	Tetraethylene glycol dimethacrylate	109-17-1		0.001	mg	6	3
SILICON DIE				supplier	backside metallization	Titanium (Ti)	7440-32-6		0.001	mg	6	3
SILICON DIE				supplier	backside metallization	Gold (Au)	7440-57-5		0.002	mg	12	6
SILICON DIE				supplier	backside metallization	Nickel (Ni)	7440-02-0		0.008	mg	49	6
Leadframe	Copper & its alloys	161.939	mg	supplier	Alloy	Copper(Cu)	7440-50-8		161.73	mg	992787	25
Leadframe				supplier	Alloy	Iron(Fe)	7439-89-6		0.129	mg	570796	505406
Leadframe				supplier	Alloy	Silicon	7440-21-3		0.032	mg	141593	403
Leadframe				supplier	Alloy	NICKEL SULFAMATE	13770-89-3		0.048	mg	212389	100
Die attach	Other Organic Materials	0.698	mg	supplier	Solder	Silver(Ag)	7440-22-4		0.017	mg	75221	150
Die attach				JIG - R	Solder	Lead(Pb)	7439-92-1	7a-Lead in high me	0.667	mg	605813	53
Die attach				supplier	Solder	Tin(Sn)	7440-31-5		0.014	mg	12716	2084
Bonding wire	Other inorganic materials	0.42	mg	supplier	Bonding wire	AL Wire	7429-90-5		0.42	mg	12716	44
Encapsulation	Other Organic Materials	154.208	mg	supplier	Mold compound	Silicone dioxide (Fused Silica)	60676-86-0		131.213	mg	3201	1313
Encapsulation				supplier	Mold compound	Polymer(phenyl glycidyl ether)	119345-05-0		7.665	mg	333333	23953
Encapsulation				supplier	Mold compound	Diglycidylether of Tetramethyl biphenol	85954-11-6		7.665	mg	333333	23953
Encapsulation				supplier	Mold compound	Phenol, Polymer with 1,4-bis(methoxymethyl)	26834-02-6		3.067	mg	133377	9584
Encapsulation				supplier	Mold compound	Carbon black	1333-86-4		1.533	mg	66667	4791
Encapsulation				supplier	Mold compound	Others	proprietary		3.065	mg	133290	9578
Finishing	Other inorganic materials	1.56	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		1.56	mg	1000000	4875