



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 *	2014-12-03
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/web/en/support/online_tech_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
	R2Y5*SH30A52	A	SH1A	2014-12-03
Amount	UoM	Unit type	ST ECOPACK Grade	
95.00	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		
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	pin	
Comment	Package: POWERFLAT WETTABLE FLANKS SINGLE; MDF valid for STL58N3LLH5			

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	R2Y5*5H3OAS2					
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	0.476	mg	supplier	die	Silicon (Si)	7440-21-3		0.411	mg	863445	4326
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.037	mg	77731	389
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.01	mg	21008	105
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	2101	11
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.011	mg	23109	116
die (s)				supplier	metallization	Vanadium (V)	7440-62-2		0.001	mg	2101	11
die (s)				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	10504	53
Leadframe	Copper & its alloys	43.089	mg	supplier	alloy	Copper (Cu)	7440-50-8		41.613	mg	965745	438032
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.979	mg	22720	10305
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.059	mg	1369	621
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.051	mg	1184	537
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.385	mg	8935	4053
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.002	mg	46	21
Soft solder	Solder	1.063	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	1.015	mg	954845	10684
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.027	mg	25400	284
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.021	mg	19755	221
Bonding wire & Ribbon	Other inorganic materials	7.828	mg	supplier	wire	Aluminium (Al)	7429-90-5		7.828	mg	1000000	82400
encapsulation	Other inorganic materials	42.388	mg	supplier	mold compound	Silica, vitreous	60676-86-0		33.273	mg	784963	350242
encapsulation				supplier	mold compound	epoxy resin	Proprietary		5.511	mg	130013	58011
encapsulation				supplier	mold compound	phenol resin	9003-35-4		2.544	mg	60017	26779
encapsulation				supplier	mold compound	metal hydroxide	Proprietary		0.848	mg	20006	8926
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.212	mg	5001	2232
connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1642