



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D  <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-04-01
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**Uncertainty Statement**


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Legal Statement		
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>
		Standard

**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*6D4FA52	A	SH1A	2015-04-01
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	Comment	
Not Applicable ; if coating is used c	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 STL120N4F6; STL120N4F6AG			

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-17th December 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*6D4FA52					
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	5.426	mg	supplier	die	Silicon (Si)	7440-21-3		5.181	mg	954847	54537
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.129	mg	23774	1358
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.036	mg	6635	379
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	5160	295
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.01	mg	1843	105
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.039	mg	7188	411
die (s)				supplier	metallization	Vanadium (V)	7440-62-2		0.003	mg	553	32
Leadframe	Copper & its alloys	42.338	mg	supplier	alloy	Copper (Cu)	7440-50-8		41.259	mg	974515	434305
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.97	mg	22911	10211
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.058	mg	1370	611
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.051	mg	1205	537
Soft solder	Solder	4.546	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.341	mg	954905	45695
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.114	mg	25077	1200
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.091	mg	20018	958
Bonding wire & Ribbon	Other inorganic materials	0.531	mg	supplier	wire & ribbon	Aluminium (Al)	7429-90-5		0.531	mg	1000000	5589
encapsulation	Other inorganic materials	42.003	mg	supplier	mold compound	Silica, vitreous	60676-86-0		32.972	mg	784992	347074
encapsulation				supplier	mold compound	epoxy resin	Proprietary		5.461	mg	130015	57484
encapsulation				supplier	mold compound	phenol resin	9003-35-4		2.52	mg	59996	26526
encapsulation				supplier	mold compound	metal hydroxide	Proprietary		0.84	mg	19999	8842
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.21	mg	5000	2211
connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1642