



## 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>	2016-12-14
<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>	ADG MD 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/support.html">http://www.st.com/web/en/support/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
STL115N10F7AG	BSY5*OD0TT52	A	SH1A	2016-12-14
Amount	UoM	Unit type	ST ECOPACK Grade	
100.00	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			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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-20th June 2016				
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	BSYS*ODDTS2					
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	8.595	mg	supplier	die	Silicon (Si)	7440-21-3		8.311	mg	966958	83110
die (s)				supplier	metallization	Aluminum (Al)	7429-90-5		0.162	mg	18848	1620
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.045	mg	5236	450
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	465	40
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.049	mg	5701	490
die (s)				supplier	metallization	Vanadium (V)	7440-62-2		0.004	mg	465	40
die (s)				supplier	metallization	Silver (Ag)	7440-22-4		0.02	mg	2327	200
Leadframe	Copper & its alloys	42.575	mg	supplier	alloy	Copper (Cu)	7440-50-8		41.489	mg	974492	414890
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.976	mg	22924	9760
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.059	mg	1386	590
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.051	mg	1198	510
Soft solder	Solder	10.496	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	10.024	mg	955030	100240
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.262	mg	24962	2620
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.21	mg	20008	2100
Bonding wire & Clip	Precious metals	7.863	mg	supplier	wire	Gold (Au)	7440-57-5		0.058	mg	7376	580
Bonding wire & Clip				supplier	clip	Copper (Cu)	7440-50-8		7.805	mg	992624	78050
encapsulation	Other inorganic materials	30.315	mg	supplier	mold compound	Silica, vitreous	60676-86-0		23.797	mg	784991	237970
encapsulation				supplier	mold compound	epoxy resin	Proprietary		3.941	mg	130002	39410
encapsulation				supplier	mold compound	phenol resin	9003-35-4		1.819	mg	60003	18190
encapsulation				supplier	mold compound	metal hydroxide	Proprietary		0.606	mg	19990	6060
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.152	mg	5014	1520
connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1560