



## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-10-11
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		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 Giacobello	<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
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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
STL8DN6LF6AG	R2Y6*7L62AC2	A	SH1A	2017-10-11
Amount	UoM	Unit type	ST ECOPACK Grade	
90	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)		

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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6x5x1	8	flat	
Comment	Package: PowerFLAT 5x6 double island WF			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015			
Query			Response
1 - Product(s) meets EU RoHS requirement without any exemptions			FALSE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions			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 : California Prop65 list, dated 7th July 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.02	Die	200
Lead	3.01	Soft solder	33478

QueryList : REACH-7th July 2017				
Query				Response
1 - Product(s) 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	R2Y6*7L62AC2				7000000.0	1000001.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	2.430	mg	supplier	die	Silicon (Si)	7440-21-3		2.196	mg	903704	24400
				supplier	metallization	Copper (Cu)	7440-50-8		0.152	mg	62551	1689
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	3292	89
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	412	11
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	412	11
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	18107	489
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	823	22
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.018	mg	7407	200
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	412	11
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	2880	78
Leadframe	M-004 Copper and its alloys	41.301	mg	supplier	alloy	Copper (Cu)	7440-50-8		40.303	mg	975836	447811
				supplier	alloy	Iron (Fe)	7439-89-6		0.948	mg	22953	10533
				supplier	alloy	Zinc (Zn)	7440-66-6		0.050	mg	1211	556
Soft solder	Solder	3.155	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.013	mg	954992	33478
				supplier	solder	Silver (Ag)	7440-22-4		0.079	mg	25040	878
				supplier	solder	Tin (Sn)	7440-31-5		0.063	mg	19968	700
Bonding wires	M-011 Other inorganic materials	0.123	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.123	mg	1000000	1367
Bonding Ribbons	M-009 Other non-ferrous metals and	1.115	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		1.115	mg	1000000	12389
Encapsulation	M-011 Other inorganic materials	41.720	mg	supplier	mold compound	Silica, vitreous	60676-86-0		32.750	mg	784995	363889
				supplier	mold compound	epoxy resin	Proprietary		5.424	mg	130010	60267
				supplier	mold compound	phenol resin	9003-35-4		2.503	mg	59995	27811
				supplier	mold compound	metal hydroxide	Proprietary		0.834	mg	19990	9267
				supplier	mold compound	Carbon black	1333-86-4		0.209	mg	5010	2322
connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1733