



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2017-06-07
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<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 omprehensive 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
	BSER*OD88R52	A	3068	2017-06-07
Amount	UoM	Unit type	ST ECOPACK Grade	
76.00	mg	Each	ECOPACK2	

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	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5-6-0.8	12	Flat	
Comment	PACKAGE: POWER FLAT 5X6 8L SINGLE; MD VALID FOR STL130N8F7, STL13080			

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)

Query : California Prop65 list, dated 27th January 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	0.06	Die back side metal	776
Lead	8.49	Soft solder	111737

QueryList : REACH-12th January 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	BSER*OD88RS2									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die or Dies (choose)	Other inorganic materials	7.402	mg	supplier	die	Silicon (Si)	7440-21-3		7.093	mg	958255	93329				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.093	mg	12564	1224				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.018	mg	2433	237				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.106	mg	14320	1395				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	675	66				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.059	mg	7971	776				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.004	mg	540	53				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.024	mg	3242	316				
				Leadframe	Copper & its alloys	49.735	mg	supplier	alloy	Copper (Cu)	7440-50-8		47.785	mg	960792	628750
								supplier	alloy	Iron (Fe)	7439-89-6		1.124	mg	22600	14789
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.068	mg	1368	895				
supplier	alloy	Zinc (Zn)	7440-66-6						0.059	mg	1186	776				
supplier	metallization	Silver (Ag)	7440-22-4						0.699	mg	14054	9197				
supplier	metallization	Lead (Pb)	7439-92-1					7a-Lead in high met	8.492	mg	924954	111737				
Soft solder	Solder	9.181	mg	supplier	solder	Tin (Sn)	7440-31-5		0.230	mg	25051	3025				
				supplier	solder	Silver (Ag)	7440-22-4		0.459	mg	49995	6039				
				supplier	wire	Gold (Au)	7440-57-5		0.116	mg	1000000	1526				
Bonding wires	Other inorganic materials	0.116	mg	supplier	mold compound	Silica, vitreous	60576-86-0		0.910	mg	925738	11974				
				supplier	mold compound	epoxy resin	85954-11-6		0.039	mg	39674	513				
				supplier	mold compound	phenol resin	26834-02-6		0.030	mg	30519	395				
				supplier	mold compound	carbon black	1333-86-4		0.004	mg	4069	53				
Connections coating	Solder	0.149	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.149	mg	1000000	1961				
Clip	Copper & its alloys	8.434	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.434	mg	1000000	110974				