



## Materials Declaration Form

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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2020-05-25</b>
<b>Company Unique ID</b>	<b>NL 008751171B01</b>		
<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>	<b>Giovanni Giacobello</b>	<b>Representative Title</b>	<b>ADG MD CHAMPION</b>
<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**

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.


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

**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
STL140N6F7	BSUO*OD6EHCF	A	Z8GA	2020-05-25
	Amount	UoM	Unit type	ST ECOPACK Grade
	109	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		
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

  
 life.augmented

Package Designator	Size	Nbr of instances	Shape	
QFN	6x5x1	8	no lead	
Comment	Package: Power FLAT 8L 6x5x1 P1.27			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 3rd January 2020			
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	514
Lead	2.22	Soft solder	20367

QueryList : REACH-16th January 2020				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	2.22	Soft solder	20367
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	2.22	Soft solder	808447

Material Composition Declaration :						Mfr Item Name	BSUO*OD6EHCF					
note : Substance present with less 0.001mg will not be declared in this document												
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	3.866	mg	supplier	die	Silicon (Si)	7440-21-3		3.635	mg	940248	33344
				supplier	metallization	Aluminium (Al)	7429-90-5		0.084	mg	21728	771
				supplier	passivation	Nickel (Ni)	7440-02-0		0.021	mg	5432	193
				supplier	metallization	Silver (Ag)	7440-22-4		0.012	mg	3104	110
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	2328	83
				supplier	metallization	Tungsten (W)	7440-33-7		0.021	mg	5432	193
				supplier	Passivation	Silicon Nitride	12033-89-5		0.013	mg	3363	119
				supplier	Passivation	Silicon Oxide	7631-86-9		0.021	mg	5432	193
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	776	28
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.035	mg	9053	321
Leadframe	Copper and its alloy	33.103	mg	Supplier	alloy & coating	Copper(CU)	7440-50-8		32.189	mg	972390	295312
				Supplier	alloy & coating	Iron(Fe)	7439-89-6		0.831	mg	25103	7624
				Supplier	alloy & coating	Phosphorus(P)	7723-14-0		0.033	mg	997	303
				Supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.050	mg	1510	459
Die Attach	Other Organic Material	2.746	mg	SVHC	soft solder	Lead	7439-92-1	7a-Lead in high me	2.220	mg	808447	20367
				Supplier	soft solder	Tin(Sn)	7440-31-5		0.124	mg	45157	1138
				Supplier	soft solder	Rosin, hydrogenated	65997-06-0		0.124	mg	45157	1138
				Supplier	soft solder	Silver(Ag)	7440-22-4		0.055	mg	20029	505
				Supplier	soft solder	Terpineol	8000-41-7		0.055	mg	20029	505
				Supplier	soft solder	2-(2-butoxyethoxy)ethanol	112-34-5		0.124	mg	45157	1138
				Supplier	soft solder	Amines, N-coco alkyltrimethylenedi-	61791-63-7		0.022	mg	8012	202
Supplier	soft solder	N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-	123-26-2		0.022	mg	8012	202				
Clip	Other Inorganic Material	19.001	mg	Supplier	alloy	Copper(CU)	7440-50-8		19.001	mg	1000000	174321
Bonding wire	Other Inorganic Material	0.100	mg	Supplier	wire	Gold(Au)	7440-57-5		0.100	mg	1000000	917
Encapsulation	Other Organic Material	47.686	mg	Supplier	mold compound	Silica vitreous	60676-86-0		40.673	mg	852933	373147
				Supplier	mold compound	Epoxy type resin	proprietary		1.909	mg	40033	17514
				Supplier	mold compound	Phenol type resin	proprietary		1.670	mg	35021	15321
				Supplier	mold compound	Magnesium hydroxide	1309-42-8		1.908	mg	40012	17505
				Supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.954	mg	20006	8752
				Supplier	mold compound	Zinc hydroxide	20427-58-1		0.477	mg	10003	4376
				Supplier	mold compound	Carbon black	1333-86-4		0.095	mg	1992	872
Connection coating	Other Inorganic Material	2.498	mg	Supplier	solder alloy	Tin(Sn)	7440-31-5		2.498	mg	1000000	22917