



## 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>	2017-12-20
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<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			
<p>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.</p>			
Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STL4N10F7	CS6M*OD0AB5F	A	Z8GA	2017-12-20
Amount		UoM	Unit type	ST ECOPACK Grade
21.20		mg	Each	ECOPACK® 2

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	
NAC	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	3.3 - 3.3 - 1	8	gull wing	
Comment	Package: Power FLAT 8L 3.3x3.3x1 P0.65			

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	TRUE
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

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	0.01	Die	236

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						Mfr Item Name	C56M*OD0AB5F					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	0.645	mg	supplier	die	Silicon (Si)	7440-21-3		0.615	mg	953488	29009
				supplier	metallization	Aluminium (Al)	7429-90-5		0.014	mg	21705	660
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	3101	94
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	6202	189
				supplier	Passivation	Silicon Oxide	7631-86-9		0.003	mg	4651	142
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.005	mg	7752	236
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.002	mg	3101	94
Leadframe	Copper and its alloy	5.857	mg	Supplier	alloy	Copper(CU)	7440-50-8		5.413	mg	924193	255330
				Supplier	alloy	Iron(Fe)	7439-89-6		0.138	mg	23562	6509
				Supplier	alloy	Lead (Pb)	7439-92-1		0.001	mg	170	48
				Supplier	alloy	Phosphorus(P)	7723-14-0		0.005	mg	854	236
				Supplier	alloy	Zinc(Zn)	7440-66-6		0.007	mg	1195	330
				Supplier	alloy	Silver(Ag)	7440-22-4		0.293	mg	50026	13821
				Supplier	glue	Silver (Ag)	7440-22-4		0.180	mg	873786	8491
Die Attach	Other Organic Material	0.206	mg	Supplier	glue	Isobornyl Methacrylate	7534-94-3		0.018	mg	87379	849
				Supplier	glue	Bismaleimide resin	35325-39-4		0.007	mg	33981	330
				Supplier	glue	polymer	Proprietary		0.001	mg	4854	47
				Supplier	wire	Copper(Cu)	7440-50-8		0.189	mg	1000000	8915
Bonding wire	Other Inorganic Material	0.189	mg	Supplier	wire	Copper(Cu)	7440-50-8		0.189	mg	1000000	8915
				Supplier	molding compound	silica vitreous	60676-86-0		10.886	mg	852867	513491
				Supplier	molding compound	epoxy resin	25068-38-6		0.511	mg	40034	24104
				Supplier	molding compound	Phenol resin	29690-82-2		0.447	mg	35020	21085
				Supplier	molding compound	Magnesium hydroxide	1309-42-8		0.511	mg	40034	24104
				Supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.255	mg	19978	12028
Encapsulation	Other Organic Material	12.764	mg	Supplier	molding compound	Zinc hydroxide	20427-58-1		0.128	mg	10028	6038
				Supplier	molding compound	carbon black	1333-86-4		0.026	mg	2039	1226
				Supplier	molding compound	tin	7440-31-5		1.539	mg	1000000	72594
				Supplier	connection coating	Tin(Sn)	7440-31-5		1.539	mg	1000000	72594
Finishing	Other Inorganic Material	1.539	mg	Supplier	connection coating	Tin(Sn)	7440-31-5		1.539	mg	1000000	72594