



Materials Declaration Form

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

*: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-03-09
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Giovanni Giacobello
Authorized Representative *	Giovanni Giacobello	Representative Title	ADG MD Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement


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Legal Statement	
Supplier Acceptance *	Legal Declaration *
true	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
STL50N6F7	81ER*OD62R52	A	3068	2018-03-09
Amount	UoM	Unit type	ST ECOPACK Grade	
90	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	Power FLAT 5x6 8L SINGLE		

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 15th December 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	211
Lead	1.69	Soft solder	18744

QueryList : REACH-15th January 2018				
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
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				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	81ER*OD62R52					
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	0.558	mg	supplier	die	Silicon (Si)	7440-21-3		0.475	mg	851521	5289
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	57245	356
				supplier	metallization	Nickel (Ni)	7440-02-0		0.008	mg	14311	89
				supplier	metallization	Silver (Ag)	7440-22-4		0.005	mg	8945	56
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	7155	44
				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	14311	89
				supplier	Passivation	Silicon Oxide	7631-86-9		0.008	mg	14311	89
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	1789	11
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.011	mg	19678	122
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	1789	11
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.005	mg	8945	56
				Leadframe	M-004 Copper and its alloys	49.035	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.049	mg	999	532
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.015	mg	306	167
Soft solder	Solder	1.766	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	1.687	mg	955266	18744
				supplier	solder	Silver (Ag)	7440-22-4		0.044	mg	24915	489
				supplier	solder	Tin (Sn)	7440-31-5		0.035	mg	19819	389
Bonding wires	M-011 Other inorganic materials	0.054	mg	supplier	wire	Copper (Cu)	7440-50-8		0.054	mg	1000000	600
Bonding Ribbons	M-009 Other non-ferrous metals and	0.321	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		0.321	mg	1000000	3567
Encapsulation	M-011 Other inorganic materials	38.117	mg	supplier	mold compound	Silica, vitreous	60676-86-0		35.295	mg	925965	392167
				supplier	mold compound	epoxy resin	85954-11-6		1.525	mg	40008	16944
				supplier	mold compound	phenol resin	26834-02-6		1.144	mg	30013	12711
				supplier	mold compound	carbon black	1333-86-4		0.153	mg	4014	1700
Connections coating	Solder	0.149	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.149	mg	1000000	1656