



## 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  * : Required Field

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2019-02-01
<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 Giapello	<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

**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
	AZDP*Z08PB1V	A	3068	2019-02-01
Amount	UoM	Unit type	ST ECOPACK Grade	
320.00	mg	Each	ECOPACK1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

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	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	Package: TO 252 DPAK - MDF for CPs: STP55H100BY-TR and STP55H100B-TR			

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 26th October 2018			
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	0.13	Die - Leadframe	403
Lead	3.09	Soft solder	9647
Antimony trioxide	1.76	Mold compound	5500

QueryList : REACH-15th January 2019				
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	3.09	Soft solder	9647
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	3.09	Soft solder	954841

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AZDP*Z08PB1V					
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	3.457	mg	supplier	die	Silicon (Si)	7440-21-3		3.215	mg	930132	10047
				supplier	metallization	Aluminium (Al)	7429-90-5		0.133	mg	38478	416
				supplier	metallization	Nickel (Ni)	7440-02-0		0.015	mg	4340	47
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	866	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	1447	16
				supplier	Passivation	Silicon Oxide	7631-86-9		0.020	mg	5786	63
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	579	6
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	1447	16
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.022	mg	6365	69
				supplier	polymer die coating	Durimide	Proprietary		0.037	mg	10560	114
Leadframe	M-004 Copper and its alloys	165.044	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.730	mg	998097	514781
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	516
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	303	152
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	288
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	43	22
Soft solder	Solder	3.233	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.087	mg	954841	9647
				supplier	solder	Silver (Ag)	7440-22-4		0.081	mg	25054	253
				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	20105	203
Bonding wires	M-011 Other inorganic materials	0.369	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.369	mg	1000000	1153
Encapsulation	M-011 Other inorganic materials	146.853	mg	supplier	mold compound	Silica, vitreous	60676-86-0		118.364	mg	806003	369888
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.280	mg	70002	32125
				supplier	mold compound	Phenol resin	9003-35-4		5.874	mg	39999	18356
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.811	mg	59999	27534
				supplier	mold compound	Antimony Trioxide	1309-64-4		1.762	mg	11998	5506
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.028	mg	7000	3213
Connections coating	Solder	1.045	mg	supplier	mold compound	Carbon black	1333-86-4		0.734	mg	4999	2294
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266