



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-04-02
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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 *	true	Legal Declaration *	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
STL36N60M6	P8CH*BQ6KF6V	A	Z4XA	2019-04-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	180.00	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		 life.augmented
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	8.0,8.0,0.8	4	flat	
Comment	Package: Power FLAT MLPD 8x8 4L			

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 23rd November 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	0.91	Die	5050
Lead	9.08	Soft solder	50428

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	9.08	Soft solder	50428
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	9.08	Soft solder	954971

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P8CH*BQ6KF6V					
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	15.196	mg	supplier	die	Silicon (Si)	7440-21-3		13.598	mg	894841	75544
				supplier	metallization	Aluminium (Al)	7429-90-5		0.355	mg	23361	1972
				supplier	metallization	Copper (Cu)	7440-50-8		0.131	mg	8621	728
				supplier	passivation	Nickel (Ni)	7440-02-0		0.779	mg	51263	4328
				supplier	metallization	Silver (Ag)	7440-22-4		0.046	mg	3027	256
				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	855	72
				supplier	Passivation	Silicon Nitride	12033-89-5		0.082	mg	5396	456
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	461	39
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	592	50
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.130	mg	8556	722
Leadframe	Copper & its alloys	77.489	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.046	mg	3027	256
				supplier	alloy	Copper (Cu)	7440-50-8		74.850	mg	965944	415833
				supplier	alloy	Iron (Fe)	7439-89-6		1.747	mg	22545	9706
				supplier	alloy	Phosphorus (P)	12185-10-3		0.019	mg	245	106
				supplier	alloy	Zinc (Zn)	7440-66-6		0.098	mg	1265	544
				supplier	metallization	Silver (Ag)	7440-22-4		0.775	mg	10001	4306
Soft solder	Solder	9.505	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	9.077	mg	954971	50428
				supplier	solder	Silver (Ag)	7440-22-4		0.238	mg	25039	1322
				supplier	solder	Tin (Sn)	7440-31-5		0.190	mg	19990	1055
Bonding wire	Other inorganic materials	0.426	mg	supplier	wire	Copper (Cu)	7440-50-8		0.426	mg	1000000	2367
				supplier	mold compound	Silica Fused	60676-86-0		68.305	mg	937020	379472
Encapsulation	Other Organic Materials	72.896	mg	supplier	mold compound	Epoxy Resin	Proprietary		2.186	mg	29988	12144
				supplier	mold compound	Phenol resin	Proprietary		2.186	mg	29988	12144
				supplier	mold compound	Carbon Black	1333-86-4		0.219	mg	3004	1217
Connection coating	Solder	4.488	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.488	mg	1000000	24933