



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 *	2018-01-05
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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
STL24N60M2	S8CH*MQ6HB8V	A	Z4XA	2018-01-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	180.00	mg	Each	ECOPACK® 2

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	
NAC	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-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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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	0.08	Die	417
Lead	9.46	Soft solder	52528

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	S8CH*MQ6H8V					
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	8.329	mg	supplier	die	Silicon (Si)	7440-21-3		7.874	mg	945372	43744
				supplier	metallization	Aluminium (Al)	7429-90-5		0.219	mg	26294	1217
				supplier	Passivation	Silicon Nitride	12033-89-5		0.052	mg	6243	289
				supplier	Passivation	Silicon Oxide	7631-86-9		0.077	mg	9245	428
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	600	28
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.075	mg	9005	417
Lead-frame	Copper & its alloys	80.718	mg	supplier	back side metallization	Silver (Ag)	7440-22-4		0.027	mg	3241	150
				supplier	alloy	Copper (Cu)	7440-50-8		77.969	mg	965943	433161
				supplier	alloy	Iron (Fe)	7439-89-6		1.820	mg	22548	10111
				supplier	alloy	Phosphorus (P)	12185-10-3		0.020	mg	247	111
				supplier	alloy	Zinc (Zn)	7440-66-6		0.102	mg	1264	567
				supplier	metallization	Silver (Ag)	7440-22-4		0.807	mg	9998	4483
Soft solder	Solder	9.901	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	9.455	mg	954954	52528
				supplier	solder	Silver (Ag)	7440-22-4		0.248	mg	25048	1378
				supplier	solder	Tin (Sn)	7440-31-5		0.198	mg	19998	1100
Bonding wire	Precious metals	0.443	mg	supplier	wire	Copper (Cu)	7440-50-8		0.443	mg	1000000	2461
				supplier	Other Organic Materials	Silica Fused	60676-86-0		71.152	mg	937024	395289
Encapsulation		75.934	mg	supplier	mold compound	Epoxy Resin	25068-38-6		2.277	mg	29987	12650
				supplier	mold compound	Phenol resin	29690-82-2		2.277	mg	29987	12650
				supplier	mold compound	Carbon Black	1333-86-4		0.228	mg	3002	1266
Finishing	Solder	4.675	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.675	mg	1000000	25972