



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Sectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-09-29
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 *	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
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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
SD2943W	MOMK*19410YW	A	BO2A	2017-09-29
Amount	UoM	Unit type	ST ECOPACK Grade	
7820	mg	Each	ECOPACK® 1	
	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
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Alloy 42		

Package Designator	Size	Nbr of instances	Shape	
Not Applicable	13.84 - 13.84 - 2	5	Not Applicable	
Comment	Package: Ceramic with metallized lead .550 DIA 4-L N/HERM W/FLG			

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
Exemption Id.	Description

QueryList : California Prop65 list, dated 7th July 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	117.70	Isolator - Leadframe	15051
Beryllium oxide	655.21	Isolator	83786
Cobalt	17.76	Leadframe	2271

QueryList : REACH-7th July 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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	MOMK*19410YW					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	6.318	mg	supplier	die	Silicon (Si)	7440-21-3		5.796	mg	917379	741
				supplier	metallization	Gold (Au)	7440-57-5		0.320	mg	50649	41
				supplier	Passivation	Silicon Oxide	7631-86-9		0.183	mg	28965	23
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	3007	2
Flange	M-004 Copper and its alloys	5411.906	mg	supplier	frame alloy	Copper (Cu)	7440-50-8		5411.906	mg	1000000	692060
Isolator	M-010 Ceramics / glass	691.195	mg	supplier	BeO	Beryllium oxide	1304-56-9		655.209	mg	947937	83786
				supplier	paste	Silicon (Si)	7440-21-3		0.447	mg	647	57
				supplier	paste	Molybdenum (Mo)	7439-98-7		31.605	mg	45725	4042
				supplier	paste	Manganese (Mn)	7439-96-5		2.572	mg	3721	329
				supplier	plating	Nickel (Ni)	7440-02-0		1.362	mg	1970	173
Disc	M-011 Other inorganic materials	576.132	mg	supplier	disc	Molybdenum (Mo)	7439-98-7		576.132	mg	1000000	73674
Leadframe/Bridge	M-011 Other inorganic materials	298.040	mg	supplier	alloy	Iron (Fe)	7439-89-6		120.271	mg	403540	15380
				supplier	alloy	Nickel (Ni)	7440-02-0		98.617	mg	330885	12611
				supplier	metallization	Gold (Au)	7440-57-5		43.680	mg	146558	5586
				supplier	metallization	Nickel (Ni)	7440-02-0		17.716	mg	59441	2265
				supplier	metallization	Cobalt (Co)	7440-48-4		17.756	mg	59576	2271
Braze Plate	M-011 Other inorganic materials	113.540	mg	supplier	Braze Plate	Silver (Ag)	7440-22-4		85.297	mg	751251	10908
				supplier	Braze Plate	Copper (Cu)	7440-50-8		28.243	mg	248749	3612
Lid/Cover	M-010 Ceramics / glass	720.928	mg	supplier	alloy	Alumina	1344-28-1		676.608	mg	938524	86523
				supplier	alloy	Silica	14808-60-7		35.611	mg	49396	4554
				supplier	Epoxy Adhesive	Epoxy Resin	Proprietary		8.709	mg	12080	1114
Bonding wire	M-008 Precious metals	1.941	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		1.941	mg	1000000	248