



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-07-16
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
STA709TR	CAZG*VA79BBQ	A	ZY1A	2018-07-16
	Amount	UoM	Unit type	ST ECOPACK Grade
	256	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	
QFN	9x9x1	64	flat	
Comment	Package: QFN 9X9X1.0 DIMPLE			

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	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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 25th May 2018			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

QueryList : REACH-27th June 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

Material Composition Declaration :						Mfr Item Name	CAZG*VA79BBQ					
note : Substance present with less 0.001mg will not be declared in this document												
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	20.259	mg	supplier	die	Silicon (Si)	7440-21-3		19.102	mg	942890	74734
				supplier	metallization	Aluminium (Al)	7429-90-5		0.080	mg	3949	313
				supplier	metallization	Copper (Cu)	7440-50-8		0.486	mg	23989	1901
				supplier	passivation	Nickel (Ni)	7440-02-0		0.002	mg	97	8
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.079	mg	3900	309
				supplier	metallization	Titanium (Ti)	7440-32-6		0.021	mg	1037	82
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	148	14
				supplier	Passivation	Silicon Nitride	12033-89-5		0.110	mg	5430	430
				supplier	Passivation	Silicon Oxide	7631-86-9		0.376	mg	18560	1471
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Leadframe	M-004 Copper and its alloys	127.066	mg	supplier	alloy	Copper (Cu)	7440-50-8		122.189	mg	961618	478048
				supplier	alloy	Iron (Fe)	7439-89-6		2.947	mg	23193	11530
				supplier	alloy	Phosphorous (P)	7723-14-0		0.103	mg	810	403
				supplier	alloy	Zinc (Zn)	7440-66-6		0.157	mg	1236	614
				supplier	metallization	Silver (Ag)	7440-22-4		1.670	mg	13143	6534
				supplier	metallization	Silver (Ag)	7440-22-4		2.614	mg	839704	10227
Die attach	M-011 Other inorganic materials	3.113	mg	supplier	glue	Epoxy Resin A	9003-36-5		0.156	mg	50112	610
				supplier	glue	Epoxy Resin B	25068-38-6		0.156	mg	50112	610
				supplier	glue	Diluent	3101-60-8		0.156	mg	50112	610
				supplier	glue	Dicyandiamide	461-58-5		0.031	mg	9960	121
Bonding wires	M-008 Precious metals	0.766	mg	supplier	wire	Gold (Au)	7440-57-5		0.759	mg	990862	2969
				supplier	wire	Palladium (Pd)	7440-05-3		0.007	mg	9138	27
Encapsulation	M-011 Other inorganic materials	99.782	mg	supplier	mold compound	Epoxy Resin A	25068-38-6		3.991	mg	39997	15614
				supplier	mold compound	Epoxy resin B	85954-11-6		3.991	mg	39997	15614
				supplier	mold compound	Silica fused (SiO2)	7631-86-9		86.811	mg	870007	339636
				supplier	mold compound	Carbon Black	1333-86-4		0.499	mg	5001	1952
Connections coating	Solder	4.614	mg	supplier	mold compound	Phenol Resin	628290-34-6		4.490	mg	44998	17567
				supplier	connection coating	Tin (Sn)	7440-31-5		4.614	mg	1000000	18052