



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 *	2018-07-17
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


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
STA8090GATR	A0XH*V839BDX	A	ZY1A	2018-07-17
	Amount	UoM	Unit type	ST ECOPACK Grade
	130	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	250	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	8x8x0.85	142	Flat	
Comment				

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 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	0.001	Die	8

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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A0XH*V839BDX					
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	5.708	mg	supplier	die	Silicon (Si)	7440-21-3		5.280	mg	925018	40615
				supplier	metallization	Aluminium (Al)	7429-90-5		0.030	mg	5256	231
				supplier	metallization	Copper (Cu)	7440-50-8		0.179	mg	31359	1377
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	175	8
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.029	mg	5081	223
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1402	62
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	175	8
				supplier	Passivation	Silicon Nitride	12033-89-5		0.041	mg	7182	314
				supplier	Passivation	Silicon Oxide	7631-86-9		0.139	mg	24352	1069
Leadframe	Copper and its alloy	87.938	mg	supplier	allow	Copper (Cu)	7440-50-8		83.106	mg	945052	639277
				supplier	allow	Iron (Fe)	7439-89-6		2.003	mg	22777	15408
				supplier	allow	Zinc (Zn)	7440-66-6		0.102	mg	1160	785
				supplier	allow	Metallic Phosphorus (P)	7723-14-0		0.026	mg	296	200
				supplier	metallization	Silver(Ag)	7440-22-4		2.701	mg	30715	20777
Die attach	Other organic materials	0.856	mg	supplier	glue	Silver	7440-22-4		0.728	mg	850467	5600
				supplier	glue	Bisphenol F type liquid epoxy resin	9003-36-5		0.051	mg	59579	392
				supplier	glue	Epoxy resin	25068-38-6		0.048	mg	56075	369
				supplier	glue	P-Tertbutylphenyl glycidyl ether	3101-60-8		0.026	mg	30374	200
				supplier	glue	dicyandiamide	461-58-5		0.003	mg	3505	23
Bonding wires	Other inorganic materials	0.637	mg	supplier	wire	Gold (Au)	7440-57-5		0.631	mg	990581	4854
				supplier	wire	Palladium (Pd)	7440-05-3		0.006	mg	9419	46
Encapsulation	Other organic materials	33.854	mg	supplier	molding compound	Epoxy Resin A	Proprietary		0.508	mg	15006	3908
				supplier	molding compound	Epoxy Resin B	Proprietary		0.508	mg	15006	3908
				supplier	molding compound	Phenol Resin	29690-82-2		1.693	mg	50009	13023
				supplier	molding compound	Silica Amorphous A	60676-86-0		27.082	mg	799965	208323
				supplier	molding compound	Silica Amorphous B	7631-86-9		3.385	mg	99988	26038
				supplier	molding compound	Metal Hydroxide	21645-51-2		0.339	mg	10013	2608
Connection coating	Other inorganic materials	1.007	mg	supplier	molding compound	Carbon Black	1333-86-4		0.339	mg	10013	2608
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.007	mg	1000000	7746