



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 *	2018-06-01
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
	AAZG*V766EBQ	A	ZY1A	2018-06-01
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 - MDF valid for CPs: TDA7707EB - TDA7707EBTR			

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	0.001	Die	4

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 :						Mfr Item Name	AAZG*V766EBQ					
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	10.529	mg	supplier	die	Silicon (Si)	7440-21-3		9.927	mg	942825	38838
				supplier	metallization	Aluminium (Al)	7429-90-5		0.042	mg	3989	164
				supplier	metallization	Copper (Cu)	7440-50-8		0.253	mg	24029	990
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	94	4
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.041	mg	3894	160
				supplier	metallization	Titanium (Ti)	7440-32-6		0.011	mg	1045	45
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	190	8
				supplier	Passivation	Silicon Nitride	12033-89-5		0.057	mg	5414	223
				supplier	Passivation	Silicon Oxide	7631-86-9		0.195	mg	18520	763
				supplier								
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	109.512	mg	supplier	mold compound	Epoxy Resin A	25068-38-6		4.380	mg	39996	17136
				supplier	mold compound	Epoxy resin B	85954-11-6		4.380	mg	39996	17136
				supplier	mold compound	Silica fused (SiO2)	7631-86-9		95.276	mg	870005	372754
				supplier	mold compound	Carbon Black	1333-86-4		0.548	mg	5003	2144
Connections coating	Solder	4.614	mg	supplier	mold compound	Phenol Resin	628290-34-6		4.928	mg	45000	19280
				supplier	connection coating	Tin (Sn)	7440-31-5		4.614	mg	1000000	18052