



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 *	2021-02-12
Company Unique ID	NL 008751171B01		
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 *	marianna grasso	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
STA8089GATTR	DOEG*V839BDX	A	9998	2021-02-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	135	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, annealed	Copper Alloy	DM00330516	

Package Designator	Size	Nbr of instances	Shape
Not Applicable	7.00,7.00,1.00	56	shape
Comment	VFQFPN 7X7X1.0 56L PITCH 0.4. MDF valid for CPs: STA8089GAT,STA8089GATTR		

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated 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 2020/363_ March 2020	
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 3rd January 2020			
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-19th January 2021				
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

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Gold, Tantalum, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	DOE*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	39110
					metallisation	Aluminium(Al)	7429-90-5		0.030	mg	5256	222
					metallisation	Copper(Cu)	7440-50-8		0.179	mg	31358	1326
					metallisation	Nickel(Ni)	7440-02-0		0.001	mg	175	7
					metallisation	Tantalum(Ta)	7440-25-7		0.029	mg	5081	215
					metallisation	Titanium(Ti)	7440-33-6		0.008	mg	1402	59
					metallisation	Tungsten(W)	7440-33-7		0.001	mg	175	7
					Passivation	Silicon nitride(SiN)	12033-89-5		0.041	mg	7183	304
					passivation	Silicon oxide	7631-86-9		0.139	mg	24352	1030
					Leadframe	M-004 Copper and its alloys	59.053	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8
alloy & coating	Iron(Fe)	7439-89-6		1.361						mg	23047	10081
alloy & coating	Phosphorus metal	7723-14-0		0.017						mg	288	126
alloy & coating	Zinc(Zn)	7440-66-6		0.070						mg	1186	519
alloy & coating	Silver (Ag)	7440-22-4		1.132						mg	19169	8385
alloy & coating	Silver (Ag)	7440-22-4		0.801						mg	850318	5933
Die attach	M-011 Other inorganic materials	0.942	mg	supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.057	mg	60510	422
					glue	epoxy resin	30583-72-3		0.038	mg	40340	281
					glue	t-Butyl phenyl glycidyl ether	3101-60-8		0.019	mg	20170	141
					glue	Phenolic resin	92-88-6		0.009	mg	9554	67
					glue	Phenol Resin	26834-02-6		0.009	mg	9554	67
					glue	Butyl cellosolve acetate	112-07-2		0.009	mg	9554	67
					wire	Gold (Au)	7440-57-5		0.171	mg	988439	1267
Bonding wires	M-008 Precious metals	0.173	mg	supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	11561	15
					wire	Silica vitreous	60676-86-0		47.904	mg	729988	354844
Encapsulation	M-011 Other inorganic materials	65.623	mg	supplier	mold compound	Amorphous silica	7631-86-9		5.250	mg	80002	38889
					mold compound	Epoxy type resin	proprietary		5.578	mg	85001	41319
					mold compound	Phenol type resin	proprietary		4.594	mg	70006	34030
					mold compound	Aluminium compound	proprietary		1.969	mg	30005	14585
					mold compound	Carbon black	1333-86-4		0.328	mg	4998	2430
connections coating	Solder	3.501	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.501	mg	1000000	25933