

## **Materials Declaration Form**

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

Supplier Information									
Company Name *	STMicroelectronics	Response Date *	23-07-2019						
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 *	MDG MD CHAMPION Representative Title		MDG MD CHAMPION						
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section						
Supplier Comment	• • • • • • • • • • • • • • • • • • • •	r to Supplier Comment section   Representative Email *   Refer to Supplier Comment section   ne Technical Support - STMicroelectronics : ://www.st.com/web/en/support/support.html							

## **Uncertainty Statement**

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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 omprehensive 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					
STM32L031G6U6S STM32L031G6U6STR	76MB*425XXXX	А	998Z	23-07-2019					
	Amount	UoM	Unit type	ST ECOPACK Grade					
	24.36	mg	Each	ECOPACK® 2					
		ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retarda (in each organic material)							

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented
Not Applicable; if coating is used or other bulk termination	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		meradymented

Package Designator	Size	Nbr of instances	Shape	
QFN	4X4X0.55	28	No lead	
Comment	Package: A0B0 UFQFPN 4X4X0.55 28L	PITCH0.5 COL 8202209		

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 requiremen	nt 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)	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								
Exemption Id. Description								

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							
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application							

Material Composition Declarat note : Substance present with l	ion: ess 0.001mg will not be declared in this do	ocument				Mfr Item Name	76MB*4	25XXXX			5999999.0	1000012.1
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration product (ppm)
Die or dies	M-011 Other inorganic materials	1.884	mg	supplier	die	Silicon (Si)	7440-21-3		1.733	mg	919851	71146
				supplier	metallization	Aluminium (AI)	7429-90-5		0.013	mg	6900	534
				supplier	metallization	Copper (Cu)	7440-50-8		0.044	mg	23355	1806
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.005	mg	2654	205
				supplier	metallization	Titanium (Ti)	7440-32-6		0.007	mg	3715	287
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	6369	493
				supplier	Passivation	Silicon Oxide	7631-86-9		0.070	mg	37155	2874
Die Attach Epoxy_ABLEBOND 800	6NS M-011 Other inorganic materials	0.127	mg	Supplier	Metals	Silver	7440-22-4		0.090	mg	704535	3687
				Supplier	Plastics/polymers	Bisphenol-F, epoxy resin	9003-36-5		0.006	mg	48437	253
				Supplier	Organic Compounds	Fatty acids, polymers with epichlorohydrin	68475-94-5		0.006	mg	48437	253
				Supplier	Organic Compounds	Gamma Butyrolactone	96-48-0		0.006	mg	48437	253
				Supplier	Organic Compounds	Epoxy Resin Proprietary	Proprietary		0.006	mg	48437	253
				Supplier	Amines	Poly(Oxy(methyl-1, 2-ethanediyl)	9046-10-0		0.006	mg	48437	253
				Supplier	Metallic compounds	Copper Oxide	1317-38-0		0.006	mg	48437	253
				Supplier	Organic Compounds	1,4-Bis(2,3-epoxypropoxy) butane	2425-79-8		0.001	mg	4844	25
EMC_G770HCD_Sumitomo	M-011 Other inorganic materials	10.925	mg	Supplier	Plastics/polymers	Epoxy Resin	Proprietary		0.323	mg	29542	13249
				Supplier	Plastics/polymers	Phenol Resin	Proprietary		0.323	mg	29542	13249
				Supplier	Glass	Silica (Amorphous) A	60676-86-0		8.606	mg	787789	353317
				Supplier	Glass	Silica (Amorphous) B	7631-86-9		1.614	mg	147710	66247
				Supplier	Additives	Carbon Black	1333-86-4		0.059	mg	5416	2429
BondingWire_Au_MKE	Bonding Wire	0.193	mg	Supplier	Metals	Gold	7440-57-5		0.193	mg	1000000	7911
Anode Ball_Tin_Asahi	Metals	0.286	mg	Supplier	Metals	Tin	7440-31-5		0.286	mg	1000000	11739
.eadframe_C7+NiPbAuAg_HDS	Metals	10.944	mg	Supplier	Metals	Nickel	7440-02-0		0.485	mg	44305	19906
				Supplier	Glass	Silicon	7440-21-3		0.078	mg	7125	3201
				Supplier	Metals	Magnesium	7439-95-4		0.019	mg	1720	773
				Supplier	Metals	Gold	7440-57-5		0.003	mg	295	133
				Supplier	Metals	Copper	7440-50-8		10.354	mg	946065	425059
				Supplier	Metals	Palladium	7440-05-3		0.005	mg	490	220