



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 *	2019-08-07
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	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 *
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
STM32G071GBU6N	71MB*460XXB	A	998Z	2019-08-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	24.11	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; if coating is used or other bulk termination	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

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 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 : 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

Material Composition Declaration :						Mfr Item Name	71MB*460XXB				5000000.0	1000000.0
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 or dies	M-011 Other inorganic materials	2.232	mg	supplier	die	Silicon (Si)	7440-21-3		2.035	mg	911738	84422
				supplier	metallization	Aluminium (Al)	7429-90-5		0.009	mg	4032	373
				supplier	metallization	Copper (Cu)	7440-50-8		0.084	mg	37634	3485
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.027	mg	12097	1120
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	448	41
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	448	41
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	9409	871
				supplier	Passivation	Silicon Oxide	7631-86-9		0.054	mg	24194	2240
				Supplier	Epoxy Resin	Epoxy Resin A	Proprietary		0.019	mg	95238	805
Die Attach Epoxy_FILM HR-5104T-25	M-011 Other inorganic materials	0.204	mg	Supplier	Epoxy Resin	Epoxy Resin B	Proprietary		0.029	mg	142857	1208
				Supplier	Epoxy Resin	Phenol Resin	Proprietary		0.029	mg	142857	1208
				Supplier	Plastics/polymers	SiO2 Filler	Proprietary		0.097	mg	476190	4027
				Supplier	Epoxy Resin	(Meta)Acrylic Copolymer	Proprietary		0.029	mg	142857	1208
				Supplier	Epoxy Resin	Epoxy Resin	Proprietary		0.315	mg	29542	13079
Mold Compound_EME-G770HCD_Sur	M-011 Other inorganic materials	10.475	mg	Supplier	Plastics/polymers	Phenol Resin	Proprietary		0.315	mg	29542	13079
				Supplier	Plastics/polymers	Silica (Amorphous) A	60676-86-0		8.210	mg	787789	340610
				Supplier	Plastics/polymers	Silica (Amorphous) B	7631-86-9		1.576	mg	147710	65393
				Supplier	Additives	Carbon Black	1333-86-4		0.058	mg	5416	2398
				Supplier	Metals	Gold	7440-57-5		0.250	mg	999420	10380
Bonding wire_WIRE Au UR2 TYPE_MH	Bonding Wire	0.250	mg	Supplier	Metals	Palladium	7440-05-3		0.000	mg	520	5
				Supplier	Metals	Lanthanum	7439-91-0		0.000	mg	20	0
				Supplier	Metals	Calcium	7440-70-2		0.000	mg	40	0
Lead frame_C7+Ni/Pb/Au-Ag_HDS	Copper & its alloys	10.944	mg	Supplier	Metals	Nickel	7440-02-0		0.485	mg	44305	20115
				Supplier	Glass	Silicon	7440-21-3		0.078	mg	7125	3235
				Supplier	Metals	Magnesium	7439-95-4		0.019	mg	1720	781
				Supplier	Metals	Silver	7440-22-4		0.002	mg	215	98
				Supplier	Metals	Copper	7440-50-8		10.351	mg	945850	429422
				Supplier	Metals	Palladium	7440-05-3		0.005	mg	490	222
				Supplier	Metals	Gold	7440-57-5		0.003	mg	295	134