



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 *	30-11-2018
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 *	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
STM32H747IIT6	321T*450XXXV	A	9991	30-11-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	1650.01	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24X24	176	L Bend	
Comment	Package : 1T LQFP 176 24x24x1.4 0110489			

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-27th June 2018				
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	3211*450XXV				5999900.0	999999.6
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	16.980	mg	supplier	die	Silicon (Si)	7440-21-3		16.238	mg	956302	9841
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	5183	53
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	16254	167
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	59	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	2650	27
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	471	5
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	59	1
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	19022	196
Mold Compound (Sumitomo G631H)	M-011 Other inorganic materials	1141.164	mg	supplier	Molding Compound	Epoxy Resin A	Proprietary		29.650	mg	25965	17970
				supplier	Molding Compound	Epoxy Resin B	Proprietary		29.650	mg	25965	17970
				supplier	Molding Compound	Phenol Resin	Proprietary		54.300	mg	47552	32909
				supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		898.314	mg	787330	544421
				supplier	Molding Compound	Silica(Amorphous) B	76361-86-9		125.830	mg	110193	76261
				supplier	Molding Compound	Carbon black	1333-86-4		3.420	mg	2995	2073
Leadframe (C7025)	M-011 Other inorganic materials	465.300	mg	supplier	Leadframe	Copper (Cu)	7440-50-8		440.406	mg	946500	266916
				supplier	Leadframe	Nickel (Ni)	7440-02-0		14.890	mg	32000	9024
				supplier	Leadframe	Silicon (Si)	7440-21-3		3.373	mg	7250	2045
				supplier	Leadframe	Magnesium (Mg)	7439-95-4		0.814	mg	1750	494
Die Attach (YIZ 8143)	M-011 Other inorganic materials	3.720	mg	supplier	Die Attach	Silver Flake	7440-22-4		5.816	mg	12500	3525
				supplier	Die Attach	Epoxy Acylate	15625-89-5		0.186	mg	50000	113
				supplier	Die Attach	Substiyuted Polyamine	68490-66-4		0.056	mg	15000	34
				supplier	Die Attach	Bisphenol F	28064-14-4		0.372	mg	100000	225
Wire (Au)	M-011 Other inorganic materials	4.150	mg	supplier	Die Attach	2-Ethylhexyl glycidyl ether	2461-15-6		0.223	mg	60000	135
				supplier	Wire	Gold	7440-57-5		4.150	mg	999900	2515
External Plating (Matte Sn)	M-011 Other inorganic materials	18.700	mg	supplier	Wire	Calcuim	7440-70-2		0.000	mg	20	0
				supplier	Matte Sn	Tin (Sn)	7440-31-5		18.698	mg	999900	11332
				supplier	Matte Sn	Impurities	Proprietary		0.002	mg	100	1