




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 *	27-11-2018
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 *
Legal Statement	<p>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.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32H747BIT6	42UH*450XXXV	A	9998	27-11-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	2240.00	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	
LQFP	28x28x1.4	265		
Comment	Package : UH LQFP 208 28x28x1.4 1.0 7147657			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	42UH*450XXXV				6999999.0	1000000.0				
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	16.439	mg	supplier	die	Silicon (Si)	7440-21-3		15.697	mg	954863	7008				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	5353	39				
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	16789	123				
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	61	0				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	2737	20				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	487	4				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	61	0				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	19648	144				
				LEADFRAME (HDS -C194 ESH)	Copper and its alloy	426.854	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		416.183	mg	975000	185796
								supplier	ALLOY	Iron (Fe)	7439-89-6		10.031	mg	23500	4478
supplier	ALLOY	Zinc (Zn)	7440-66-6						0.512	mg	1200	229				
supplier	ALLOY	Metallic Phosphorus (P)	7723-14-0						0.128	mg	300	57				
supplier	COATING	Silver(Ag)	7440-22-4						1.400	mg	1000000	625				
LEADFRAME (HDS - Ag Plating)	M-011 Other inorganic materials	1.400	mg	supplier	COATING	Silver(Ag)	7440-22-4		1.400	mg	1000000	625				
DIE ATTACH (Evertch - AP4200)	M-011 Other inorganic materials	2.452	mg	supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-36-5		0.392	mg	160000	175				
				supplier	GLUE	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.037	mg	15000	16				
				supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-35-4		0.037	mg	15000	16				
				supplier	GLUE	2-butoxyethyl acetate	112-07-2		0.098	mg	40000	44				
BONDING WIRE (MKE - Au HTS 2N)	M-011 Other inorganic materials	5.746	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		5.692	mg	990480	2541				
				supplier	BONDING WIRE	Palladium (Pd)	2023568		0.055	mg	9500	24				
				supplier	BONDING WIRE	Calcium (Ca)	7440-70-2		0.000	mg	20	0				
ENCAPSULATION (Sumitomo - G631S)	M-011 Other inorganic materials	1775.758	mg	supplier	MOLDING COMPOUND	Epoxy Resin A	Proprietary		17.765	mg	10000	7931				
				supplier	MOLDING COMPOUND	Epoxy Resin B	Proprietary		17.765	mg	10000	7931				
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		88.825	mg	50000	39654				
				supplier	MOLDING COMPOUND	Silica(Amorphous) A	60676-86-0		1393.810	mg	785000	622238				
				supplier	MOLDING COMPOUND	Silica(Amorphous) B	7631-86-9		248.710	mg	140000	111031				
FINISHING (Sytron - Pure Tin)	M-011 Other inorganic materials	11.350	mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		8.882	mg	5000	3965				
				supplier	COATING	Tin (Sn)	7440-31-5		11.350	mg	1000000	5067				