




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 *	2018-12-11
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				
<p>While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.</p>				
Legal Statement				
Supplier Acceptance *	<table style="width: 100%; border: none;"> <tr> <td style="width: 35%; text-align: center;">true</td> <td style="width: 30%; text-align: center;">Legal Declaration *</td> <td style="width: 35%; text-align: center;">Standard</td> </tr> </table>	true	Legal Declaration *	Standard
true	Legal Declaration *	Standard		
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
STM32H755XIH6	PACV*450XXXV	A	9996	2018-12-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	368.67	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	
Tin/Silver/Copper (SAC105)	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	14x14x1.2	265	No lead	
Comment	Package : A07U TFBGA 14X14X1.2 P 0.8 240+25L DM00221013			

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	PACV*450XXXV				5999999.0	1000002.0
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	10.485	mg	supplier	die	Silicon (Si)	7440-21-3		9.743	mg	929232	26427
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	8393	239
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	26323	749
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	95	3
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	4292	122
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	763	22
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	95	3
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	30806	876
				supplier	CORE	Glass Cloth	65997-17-3		12.471	mg	106100	33828
				supplier	CORE	Epoxy resin	61788-97-4		9.721	mg	82700	26367
SUBSTRATE (DS7409HGB)	M-011 Other inorganic materials	117.543	mg	supplier	CORE	Flame resistant epoxy resin	223769-10-6		2.939	mg	25000	7971
				supplier	CORE	Heat resistant resin	25722-66-1		2.939	mg	25000	7971
				supplier	CORE	Silica filler	7631-86-9		7.205	mg	61300	19544
				supplier	CORE	Metal Hydroxide	Proprietary		0.588	mg	5000	1594
				supplier	COPPER FOIL	Copper (Cu)	7440-50-8		26.506	mg	225500	71896
				supplier	SOLDERMASK	Solvent naphtha(petroleum),heavy aromatic	64742-94-5		2.681	mg	22810	7273
				supplier	SOLDERMASK	Napthalene	91-20-3		0.048	mg	410	131
				supplier	SOLDERMASK	Phoshinoxide derivative	Proprietary		0.247	mg	2100	670
				supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6		0.417	mg	3550	1132
				supplier	SOLDERMASK	Barium sulfate	7727-43-7		1.267	mg	10780	3437
				supplier	SOLDERMASK	Dipropylene glycol monomethyl ether	34590-94-8		1.158	mg	9850	3140
				supplier	CU PLATING	Copper (Cu)	7440-50-8		29.186	mg	248300	79166
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		17.302	mg	147200	46932
				supplier	AU PLATING	Gold (Au)	7440-57-5		2.868	mg	24400	7779
				DIE ATTACH (2300)	M-011 Other inorganic materials	1.436	mg	supplier	GLUE	Silver (Ag)	7440-22-4	
supplier	GLUE	Bismaleimide monomer	Proprietary						0.138	mg	96000	374
supplier	GLUE	Silane	Proprietary						0.001	mg	1000	4
BONDING WIRE (MKE 4N)	M-011 Other inorganic materials	6.663	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		6.663	mg	1000000	18073
SOLDERBALL (Sn98.5Ag0.1Cu0.5)	M-011 Other inorganic materials	43.673	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		43.018	mg	985002	116684
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.437	mg	10006	1185
				supplier	SOLDERBALL	Copper (Cu)	7440-50-8		0.218	mg	4992	591
ENCAPSULATION (GE-100LFCS)	M-011 Other inorganic materials	188.870	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		169.909	mg	899607	460870
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		8.533	mg	45177	23144
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		7.584	mg	40157	20573
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		1.896	mg	10039	5143
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.948	mg	5020	2572