




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 *	13-06-2018
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
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
STM32H743AI16	44OQ*450XXXY	A	9996	13-06-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	58.34	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	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	7X7X0.6	169	No lead	
Comment	Package : A0YV UFBGA 7X7X0.6 169L P 0.5 MM 8502430			

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-12th January 2017				
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	440Q*450XXX				6000000.0	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	4.802	mg	supplier	die	Silicon (Si)	7440-21-3		4.050	mg	845481	69592				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.088	mg	18326	1508				
				supplier	metallization	Copper (Cu)	7440-50-8		0.276	mg	57476	4731				
				supplier	passivation	Nickel (Ni)	7440-02-0		0.001	mg	208	17				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.045	mg	9371	771				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1666	137				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	208	17				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	67264	5537				
				supplier	CORE	Glass Cloth	65997-17-3		3.405	mg	170000	58370				
				supplier	CORE	Epoxy resin	61788-97-4		0.801	mg	40000	13734				
SUBSTRATE (DS7409HGB)	M-011 Other inorganic materials	20.031	mg	supplier	CORE	Flame resistant epoxy resin	223769-10-6		0.801	mg	40000	13734				
				supplier	CORE	Heat resistant resin	25722-66-1		0.801	mg	40000	13734				
				supplier	CORE	Silica filler	7631-86-9		2.203	mg	110000	37769				
				supplier	CORE	Metal Hydroxide	Proprietary		0.401	mg	20000	6867				
				supplier	CORE	Copper (Cu)	7440-50-8		8.413	mg	420000	144209				
				supplier	SOLDERMASK (AUS320)	Solvent naphtha(petroleum),heavy aromatic	64742-94-5		1.102	mg	55000	18885				
				supplier	SOLDERMASK (AUS320)	Napthalene	91-20-3		0.116	mg	5800	1992				
				supplier	SOLDERMASK (AUS320)	Phosphin oxide derivative	Proprietary		0.040	mg	2000	687				
				supplier	SOLDERMASK (AUS320)	Talc containing no asbestiform fibers	14807-96-6		0.300	mg	15000	5150				
				supplier	SOLDERMASK (AUS320)	Barium sulfate	7727-43-7		0.501	mg	25000	8584				
				supplier	SOLDERMASK (AUS320)	Dipropylene glycol monomethyl ether	34590-94-8		0.300	mg	15000	5150				
				supplier	CU PLATING	Copper (Cu)	7440-50-8		0.721	mg	36000	12361				
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		0.100	mg	5000	1717				
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.024	mg	1200	412				
				DIE ATTACH (ATB-130U)	M-011 Other inorganic materials	0.582	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.407	mg	700000	6985
								supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.058	mg	100000	998
								supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.054	mg	92000	918
supplier	GLUE	Dapsone	80-08-0						0.056	mg	97000	968				
supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6						0.006	mg	10000	100				
supplier	GLUE	4,4, isopropylidenediphenol	80-05-7		0.001	mg	1000	10								
BONDING WIRE (MKE 4N)	M-011 Other inorganic materials	1.181	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.181	mg	1000000	20244				
SOLDERBALL (Sn96.5Ag3.5)	M-011 Other inorganic materials	5.248	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		5.064	mg	965000	86802				
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.184	mg	35000	3148				
ENCAPSULATION (GE-100LFC5)	M-011 Other inorganic materials	26.496	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		23.779	mg	900000	407592				
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		1.223	mg	45000	20956				
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		1.087	mg	40000	18628				
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.272	mg	10000	4657				
supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.136	mg	5000	2329								