



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 *	2017-03-01
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Patrick Crudo	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 688 339	Representative Email *	patrick.crudo@st.com
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

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
STM32F469AEH6	P6OQ*434XXXA	A	9996	2017-03-01
	Amount	UoM	Unit type	ST ECOPACK Grade
	55.10	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	
SOLDERBALL (Sn96.5Ag3.5)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	7X7X0.6	169	flat	
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
4,4, Isopropylidenediphenol	1000	0.007815	glue	142

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P6OQ*434XXXA									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die	Other inorganic materials	5.096	mg	supplier	die	Silicon (Si)	7440-21-3		3.786	mg	742936	68711				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.092	mg	18053	1670				
				supplier	metallization	Copper (Cu)	7440-50-8		0.595	mg	116758	10799				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	392	36				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.083	mg	16287	1506				
				supplier	metallization	Tungsten (W)	7440-33-7		0.267	mg	52394	4846				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.070	mg	13736	1270				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.201	mg	39443	3648				
				supplier	CORE	Glass Cloth	65997-17-3		1.879	mg	106100	34096				
				supplier	CORE	Epoxy resin	61788-97-4		1.464	mg	82700	26577				
SUBSTRATE (DS7409HGB)	Other inorganic materials	17.707	mg	supplier	CORE	Flame resistant epoxy resin	223769-10-6		0.443	mg	25000	8034				
				supplier	CORE	Heat resistant resin	25722-66-1		0.443	mg	25000	8034				
				supplier	CORE	Silica filler	7631-86-9		1.085	mg	61300	19699				
				supplier	CORE	Metal Hydroxide	Proprietary		0.089	mg	5000	1607				
				supplier	COPPER FOIL	Copper (Cu)	7440-50-8		3.993	mg	225500	72467				
				supplier	SOLDERMASK	Solvent naphtha(petroleum),heavy aromatic	64742-94-5		0.404	mg	22810	7330				
				supplier	SOLDERMASK	Napthalene	91-20-3		0.007	mg	410	132				
				supplier	SOLDERMASK	Phosinnoxide derivative	Proprietary		0.037	mg	2100	675				
				supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6		0.063	mg	3550	1141				
				supplier	SOLDERMASK	Barium sulfate	7727-43-7		0.191	mg	10780	3464				
				supplier	SOLDERMASK	Dipropylene glycol monomethyl ether	34590-94-8		0.174	mg	9850	3165				
				supplier	CU PLATING	Copper (Cu)	7440-50-8		4.397	mg	248300	79794				
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		2.606	mg	147200	47304				
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.432	mg	24400	7841				
				DIE ATTACH (ATB-130U)	Other inorganic materials	1.563	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		1.094	mg	700000	19857
								supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.156	mg	100000	2837
								supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.141	mg	90000	2553
supplier	GLUE	Dapsone	80-08-0						0.148	mg	95000	2695				
supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6						0.016	mg	10000	284				
supplier	SVHC	GLUE	4,4, Isopropylidenediphenol					80-05-7		0.008	mg	5000	142			
BONDING WIRE (MKE 4N)	Other inorganic materials	1.092	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.092	mg	1000000	19819				
SOLDERBALL (Sn96.5Ag3.5)	Other inorganic materials	5.248	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		5.064	mg	964994	91906				
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.184	mg	35006	3334				
ENCAPSULATION (GE-100LFC5)	Other inorganic materials	24.395	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		21.955	mg	899996	398457				
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		1.098	mg	45002	19924				
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		0.976	mg	40002	17710				
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.244	mg	10000	4428				
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.122	mg	5000	2214				