



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 *	2016-12-14
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
STM32L072VZI6	P2MJ*447XXXZ	A	9996	2016-12-14
	Amount	UoM	Unit type	ST ECOPACK Grade
	64.00	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	
SOLDERBALL (Sn96.5Ag3.5)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	7x7x0.60	100	flat	
Comment	Package: A0C2 UFBGA 7x7x0.60 100L R12sq P0.5 8219030			

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-20th June 2016				
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	P2MJ*447XXXZ					
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	1.916	mg	supplier	die	Silicon (Si)	7440-21-3		1.611	mg	840814	25172
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	14092	422
				supplier	metallization	Copper (Cu)	7440-50-8		0.088	mg	45929	1375
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.010	mg	5219	156
				supplier	metallization	Titanium (Ti)	7440-32-6		0.013	mg	6785	203
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	522	16
				supplier	Passivation	Silicon Nitride	12033-89-5		0.024	mg	12526	375
				supplier	Passivation	Silicon Oxide	7631-86-9		0.142	mg	74113	2219
				supplier	CORE	Organic resin	7328-97-4		4.437	mg	132700	69327
				supplier	CORE	Other inorganic filler	7631-86-9		2.217	mg	66300	34638
SUBSTRATE (DS7409HGB)	Other inorganic materials	33.436	mg	supplier	CORE	Glass fiber	65997-17-3		3.548	mg	106100	55431
				supplier	CU FOIL	Copper (Cu)	7440-50-8		7.540	mg	225500	117810
				supplier	SOLDERMASK	Acrylate resin	Trade secret		0.505	mg	15100	7889
				supplier	SOLDERMASK	Acrylated monomer	Trade secret		0.077	mg	2300	1202
				supplier	SOLDERMASK	Epoxy resin	Trade secret		0.211	mg	6300	3291
				supplier	SOLDERMASK	Phthalocyanine blue	147-14-8		0.003	mg	100	52
				supplier	SOLDERMASK	Organic pigment	Trade secret		0.003	mg	100	52
				supplier	SOLDERMASK	Barium sulfate	7727-43-7		0.237	mg	7100	3709
				supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6		0.053	mg	1600	836
				supplier	SOLDERMASK	Silica, amorphous	7631-86-9		0.013	mg	400	209
				supplier	SOLDERMASK	Phosphinooxide derivative	Trade secret		0.053	mg	1600	836
				supplier	SOLDERMASK	Amine compounds	Trade secret		0.020	mg	600	313
				supplier	SOLDERMASK	Antifoamer & levelling agent	Trade secret		0.003	mg	100	52
				supplier	SOLDERMASK	Dipropylene glycol monoethyl ether	34590-94-8		0.090	mg	2700	1411
				supplier	SOLDERMASK	Solvent naphthalene(heavy aromatic)	64742-94-5		0.164	mg	4900	2560
				supplier	SOLDERMASK	Napthalene (Carc. Cat 3, R40)	91-20-3		0.013	mg	400	209
				supplier	SOLDERMASK	Dipropylene glycol monoethyl ether acetate	88917-22-0		0.027	mg	800	418
				supplier	SOLDERMASK	Diethylene glycol monoethyl ether acetate	112-15-2		0.181	mg	5400	2821
				supplier	CU PLATING	Copper (Cu)	7440-50-8		8.302	mg	248300	129721
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		4.922	mg	147200	76903
supplier	AU PLATING	Gold (Au)	7440-57-5		0.816	mg	24400	12747				
DIE ATTACH (ATB-130U)	Other inorganic materials	0.625	mg	supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.438	mg	700000	6836
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.063	mg	100000	977
				supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.056	mg	90000	879
				supplier	GLUE	Dapsone	80-08-0		0.056	mg	90000	879
				supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6		0.006	mg	10000	98
supplier	GLUE	4,4, Isopropylidenediphenol	80-05-7		0.006	mg	10000	98				
BONDING WIRE (MKE 4N)	Other inorganic materials	0.936	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.936	mg	1000000	14625
SOLDERBALL (Sn96.5Ag3.5)	Other inorganic materials	3.105	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		2.996	mg	964895	46813
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.109	mg	35105	1703
ENCAPSULATION (GE-100LFC5)	Other inorganic materials	23.982	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		21.584	mg	900000	337247
				supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		1.079	mg	45000	16862
				supplier	MOLDING COMPOUND	Phenol resin	Trade secret		0.959	mg	40000	14989
				supplier	MOLDING COMPOUND	Metal Hydroxide	Trade secret		0.240	mg	10000	3747
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.120	mg	5000	1874