



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 *	26-07-2017
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section		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
STM32F042C4U6	S3MI*445XXXA	A	998Z	26-07-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	97.48	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	
QFN	7X7X0.55	48	No lead	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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	S3MI*445XXXA				6000000.0	0.0
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	2.799	mg	supplier	die	Silicon (Si)	7440-21-3		2.526	mg	902465	25914
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	6788	195
				supplier	metallization	Copper (Cu)	7440-50-8		0.093	mg	33226	954
				supplier	metallization	Cobalt (Co)	7440-48-4		0.017	mg	6074	174
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1786	51
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	3573	103
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	4287	123
				supplier	Passivation	Silicon Oxide	7631-86-9		0.117	mg	41801	1200
				Supplier	Metals	Silver	7440-22-4		0.327	mg	704535	3353
				Die Attach Material_ABLEBOND 8290	M-011 Other inorganic materials	0.464	mg	Supplier	Plastics/polymers	Bisphenol-F, epoxy resin	9003-36-5	
Supplier	Polymers	Fatty acids, polymers with epichlorohydrin	68475-94-5						0.022	mg	48437	230
Supplier	Organic Compounds	Gamma Butyrolactone	96-48-0						0.022	mg	48437	230
Supplier	Epoxy Resin	Epoxy Resin Proprietary	Properties						0.022	mg	48437	230
Supplier	Amines	Poly(Oxy(methyl-1, 2-ethanediyl))	9046-10-0						0.022	mg	48437	230
Supplier	Metallic compounds	Copper Oxide	1317-38-0						0.022	mg	48437	230
Supplier	Organic Compounds	1,4-Bis(2,3-epoxypropoxy) butane	2425-79-8						0.002	mg	4844	23
Mold Compound_EME-G770_Sumitor	M-011 Other inorganic materials	36.265	mg					Supplier	Epoxy Resin	Epoxy Resin A	Proprietary	
				Supplier	Epoxy Resin	Epoxy Resin B	Proprietary		0.723	mg	19837	7414
				Supplier	Phenol Resin	Phenol Resin A	Proprietary		0.723	mg	19837	7414
				Supplier	Phenol Resin	Phenol Resin B	Proprietary		0.723	mg	19837	7414
				Supplier	Glass	Silica (Amorphous) A	60676-86-0		26.518	mg	732452	-727956
				Supplier	Glass	Silica (Amorphous) B	7631-86-9		5.930	mg	162767	60832
				Supplier	Metallic compounds	Metal Hydroxide	Proprietary		0.723	mg	19837	7414
				Supplier	Additives	Carbon Black	1333-86-4		0.204	mg	5595	2091
Bonding wire_WIRE AG 0.8MIL SI TYP	Bonding Wire	0.378	mg	Supplier	Metals	Silver	7440-22-4		0.363	mg	960000	3726
				Supplier	Metals	Others	Proprietary		0.015	mg	40000	155
Anode Ball_Pure Tin_Nuonengda	M-011 Other inorganic materials	3.693	mg	Supplier	Metals	Tin	7440-31-5		3.693	mg	1000000	37883
Lead frame_C7+Ag_HDS	Copper & its alloys	53.878	mg	Supplier	Metals	Nickel	7440-02-0		1.582	mg	29365	16231
				Supplier	Glass	Silicon	7440-21-3		0.350	mg	6500	3593
				Supplier	Metals	Magnesium	7439-95-4		0.084	mg	1565	865
				Supplier	Metals	Silver	7440-22-4		3.394	mg	63000	34822
				Supplier	Metals	Copper	7440-50-8		48.467	mg	899570	497217