



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 *	2017-01-24
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
STM8L101F3U6ATR	46E4*761XXXY	A	9996	2017-01-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	19.10	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	3X3X0.6	20	No lead	
Comment	Package: A0A5 UFQFPN 3X3X0.6 20L 0.5 MM PITCH 8177031			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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	46E4*761XXY					
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	0.785	mg	supplier	die	Silicon (Si)	7440-21-3		0.722	mg	919745	37801
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	7643	314
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.018	mg	22930	942
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		0.002	mg	2548	105
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	3822	157
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.005	mg	6369	262
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.029	mg	36943	1518
LEADFRAME (C7025RuPPF)	Other inorganic materials	9.289	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		8.936	mg	962000	468001
LEADFRAME (C7025RuPPF)				supplier	ALLOY	Nickel (Ni)	7440-02-0		0.279	mg	30000	14595
LEADFRAME (C7025RuPPF)				supplier	ALLOY	Silicon (Si)	7440-21-3		0.060	mg	6500	3162
LEADFRAME (C7025RuPPF)				supplier	ALLOY	Magnesium (Mg)	7439-95-4		0.014	mg	1500	729
LEADFRAME (C7025RuPPF) Coating	Other inorganic materials	0.208	mg	supplier	COATING	Nickel (Ni)	7440-02-0		0.203	mg	975400	10655
LEADFRAME (C7025RuPPF) Coating				supplier	COATING	Palladium (Pd)	7440-05-3		0.004	mg	20700	226
LEADFRAME (C7025RuPPF) Coating				supplier	COATING	Gold (Au)	7440-57-5		0.001	mg	2200	24
LEADFRAME (C7025RuPPF) Coating				supplier	COATING	Silver (Ag)	7440-22-4		0.000	mg	1700	19
DIE ATTACH (ATB-F125E)	Other inorganic materials	0.116	mg	supplier	GLUE	Silicon dioxide	7631-86-9		0.070	mg	600000	3643
DIE ATTACH (ATB-F125E)				supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3		0.029	mg	250000	1518
DIE ATTACH (ATB-F125E)				supplier	GLUE	Poly[oxy[(2-oxiranyl)-1,2cyclohexanediyl]],a-h	244772-007		0.006	mg	50000	304
DIE ATTACH (ATB-F125E)				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.006	mg	50000	304
DIE ATTACH (ATB-F125E)				supplier	GLUE	Reaction product:bisphenol-A-(epichlorhydrin	25068-38-6		0.006	mg	50000	304
BONDING WIRE	Other inorganic materials	0.030	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.030	mg	1000000	1687
ENCAPSULATION (EME G700Y)	Other inorganic materials	8.623	mg	supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		0.753	mg	90000	39448
ENCAPSULATION (EME G700Y)				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		7.451	mg	860000	376949
ENCAPSULATION (EME G700Y)				supplier	MOLDING COMPOUND	Phenol Resin	205830-20-2		0.377	mg	45000	19724
ENCAPSULATION (EME G700Y)				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.042	mg	5000	2192
EXTERNAL PLATING	Other inorganic materials	0.049	mg	supplier	COATING	Nickel (Ni)	7440-02-0		0.043	mg	882600	2254
EXTERNAL PLATING				supplier	COATING	Palladium (Pd)	7440-05-3		0.003	mg	52400	134
EXTERNAL PLATING				supplier	COATING	Gold (Au)	7440-57-5		0.002	mg	36400	93
EXTERNAL PLATING				supplier	COATING	Silver (Ag)	7440-22-4		0.001	mg	28600	73