



## Materials Declaration Form


<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	15-11-2018
<b>Company Unique ID</b>	NL 008751171B01		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	MDG MD CHAMPION	<b>Representative Title</b>	MDG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

Uncertainty Statement	
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Legal Statement	
<b>Supplier Acceptance *</b>	true
	<b>Legal Declaration *</b> <b>Standard</b>
<b>Legal Statement</b>	<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
STM32F469IHH6	P0MR*434XXXA	A	9996	15-11-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	110.00	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	10X10X0.6	201	No lead	
Comment	Package : A0E7 UFBGA 10X10X0.6 176+25 P0.65 8249558			

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-27th June 2018				
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 :						Mfr Item Name	POMR*434XXXA			6000001.0	999999.5	
note : Substance present with less 0.001mg will not be declared in this document												
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	6.244	mg	supplier	die	Silicon (Si)	7440-21-3		4.934	mg	790199	44855
				supplier	metallization	Aluminium (Al)	7429-90-5		0.092	mg	14734	836
				supplier	metallization	Copper (Cu)	7440-50-8		0.595	mg	95291	5409
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	320	18
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.083	mg	13293	755
				supplier	metallization	Tungsten (W)	7440-33-7		0.267	mg	42761	2427
				supplier	Passivation	Silicon Nitride	12033-89-5		0.070	mg	11211	636
				supplier	Passivation	Silicon Oxide	7631-86-9		0.201	mg	32191	1827
				supplier	CORE	Organic resin	7328-97-4		4.922	mg	132700	44744
				supplier	CORE	Other inorganic filler	7631-86-9		2.459	mg	66300	22355
SUBSTRATE (DS7409HGB)	M-011 Other inorganic materials	37.090	mg	supplier	CORE	Glass fiber	65997-17-3		3.935	mg	106100	35775
				supplier	CU FOIL	Copper (Cu)	7440-50-8		8.364	mg	225500	76035
				supplier	SOLDERMASK	Morpholine derivative	Proprietary	1.435	mg	38700	13049	
				supplier	SOLDERMASK	Barium sulfate	7727-43-7		0.004	mg	100	34
				supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6		0.004	mg	100	34
				supplier	SOLDERMASK	Dipropylene Glycol Monomethyl Ether	34590-94-8		0.315	mg	8500	2866
				supplier	SOLDERMASK	Napthalene	91-20-3		0.315	mg	8500	2866
				supplier	SOLDERMASK	Epoxy resin	85954-11-6		0.111	mg	3000	1012
				supplier	SOLDERMASK	Amine compounds	Proprietary	0.185	mg	5000	1686	
				supplier	SOLDERMASK	Levelling agents	Proprietary	0.074	mg	2000	674	
				supplier	SOLDERMASK	3-Methoxy-3-Methyl Butyl-Acetate	Proprietary	0.556	mg	15000	5058	
				supplier	CU PLATING	Copper (Cu)	7440-50-8		12.982	mg	350000	118014
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		1.298	mg	35000	11801
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.130	mg	3500	1180
				DIE ATTACH (ATB-130U)	M-011 Other inorganic materials	1.579	mg	supplier	GLUE	Silver (Ag)	7440-22-4	
supplier	GLUE	epoxy resin	Proprietary					0.253	mg	160000	2297	
supplier	GLUE	aromatique amine	Proprietary					0.047	mg	30000	431	
supplier	GLUE	Epoxyde Bisphenol A Resin	25068-38-6						0.016	mg	10000	144
BONDING WIRE (MKE 4N)	M-011 Other inorganic materials	2.145	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		2.145	mg	1000000	19500
SOLDERBALL (Sn96.5Ag3.5)	M-011 Other inorganic materials	6.241	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		6.023	mg	965007	54754
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.218	mg	34993	1985
ENCAPSULATION (GE-100LFC5)	M-011 Other inorganic materials	56.701	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		50.900	mg	900001	462723
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary	2.610	mg	45000	23731	
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary	2.320	mg	40000	21095	
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary	0.580	mg	10000	5274	
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.290	mg	5000	2637