



## 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>	2017-02-24
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	LAURENT TOSI	<b>Representative Title</b>	MDG MD CHAMPION
<b>Representative Phone *</b>	33 442 685 795	<b>Representative Email *</b>	<a href="mailto:laurent.tosi@st.com">laurent.tosi@st.com</a>
<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>	Standard
<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 omprehensive 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
STM32L496AGI6	P00Q*461XXXB	A	9996	2017-02-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	64.68	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	No lead	
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	0.00547	Glue	85

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P00Q*461XXXB					
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	4.055	mg	supplier	die	Silicon (Si)	7440-21-3		3.397	mg	837731	52520
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	7891	495
				supplier	metallization	Copper (Cu)	7440-50-8		0.279	mg	68804	4314
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	247	15
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.090	mg	22195	1391
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	740	46
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	493	31
				supplier	Passivation	Silicon Nitride	12033-89-5		0.071	mg	17509	1098
				supplier	Passivation	Silicon Oxide	7631-86-9		0.180	mg	44390	2783
				SUBSTRATE (DS7409HGB)	Other inorganic materials	17.358	mg	supplier	CORE	Glass Cloth	65997-17-3	
supplier	CORE	Epoxy resin	61788-97-4						1.435	mg	82700	22193
supplier	CORE	Flame resistant epoxy resin	223769-10-6						0.434	mg	25000	6709
supplier	CORE	Heat resistant resin	25722-66-1						0.434	mg	25000	6709
supplier	CORE	Silica filler	7631-86-9						1.064	mg	61300	16451
supplier	CORE	Metal Hydroxide	Proprietary						0.087	mg	5000	1342
supplier	COPPER FOIL	Copper (Cu)	7440-50-8						3.914	mg	225500	60515
supplier	SOLDERMASK	Solvent naphtha(petroleum),heavy aromatic	64742-94-5						0.396	mg	22810	6121
solvent	SOLDERMASK	Napthalene	91-20-3						0.007	mg	410	110
supplier	SOLDERMASK	Phoshinoxide derivative	Proprietary						0.036	mg	2100	564
supplier	SOLDERMASK	Talc containing no asbestiform fibers	14807-96-6						0.062	mg	3550	953
supplier	SOLDERMASK	Barium sulfate	7727-43-7						0.187	mg	10780	2893
supplier	SOLDERMASK	Dipropylene glycol monomethyl ether	34590-94-8						0.171	mg	9850	2643
supplier	CU PLATING	Copper (Cu)	7440-50-8						4.310	mg	248300	66634
supplier	NI PLATING	Nickel (Ni)	7440-02-0						2.555	mg	147200	39503
supplier	AU PLATING	Gold (Au)	7440-57-5						0.424	mg	24400	6548
DIE ATTACH (ATB-130U)	Other inorganic materials	1.094	mg					supplier	GLUE	Butadiene,acrylonitrile polymer,carboxy-termi	68610-41-3	
				supplier	GLUE	Phenol-formaldehyde polymer	9003-35-4		0.109	mg	100000	1691
				supplier	GLUE	Phenol polymer with formaldehyde,glycidyl et	28064-14-4		0.098	mg	90000	1522
				supplier	GLUE	Dapsone	80-08-0		0.104	mg	95000	1607
				supplier	GLUE	Reaction product bisphenol-A-(epichlorhydrin	25068-38-6		0.011	mg	10000	169
SVHC	GLUE	4,4, isopropylidenediphenol	80-05-7		0.005	mg	5000	85				
BONDING WIRE (MKE 4N)	Other inorganic materials	1.291	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.291	mg	1000000	19960
SOLDERBALL (Sn96.5Ag3.5)	Other inorganic materials	5.248	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		5.064	mg	964994	78293
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.184	mg	35006	2840
ENCAPSULATION (GE-100LFC5)	Other inorganic materials	35.634	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		32.005	mg	898152	494821
				supplier	MOLDING COMPOUND	Epoxy resin	Proprietary		1.633	mg	45831	25250
				supplier	MOLDING COMPOUND	Phenol resin	Proprietary		1.452	mg	40739	22444
				supplier	MOLDING COMPOUND	Metal Hydroxide	Proprietary		0.363	mg	10185	5611
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.181	mg	5092	2806