



## 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  <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-09-20
<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>	Giovanni Giacopello	<b>Representative Title</b>	ADG 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>
		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
CLT3-4BT6-TR	8CYA*AD02UA6	A	9992	2018-09-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	72	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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	6.5 - 4.4 - 0.9	20	gull wing	
Comment	TSSOP 20 BODY 4.4 PITCH 0.65			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 25th May 2018			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.55	Die - Leadframe	7639

QueryList : REACH-15th January 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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	8CYA*AD02UA6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	7.367	mg	supplier	die	Silicon (Si)	7440-21-3		7.120	mg	966472	98889
				supplier	metallization	Aluminium (Al)	7429-90-5		0.109	mg	14796	1514
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	4208	431
				supplier	Passivation	Silicon Oxide	7631-86-9		0.058	mg	7873	806
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.006	mg	814	83
				supplier	back side metallization	Gold (Au)	7440-57-5		0.015	mg	2036	208
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.027	mg	3665	375
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	136	14
Leadframe	M-004 Copper and its alloys	22.962	mg	supplier	alloy	Copper (Cu)	7440-50-8		22.060	mg	960718	306389
				supplier	alloy	Nickel (Ni)	7440-02-0		0.523	mg	22777	7264
				supplier	alloy	Silicon (Si)	7440-21-3		0.119	mg	5181	1653
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.030	mg	1307	417
				supplier	metallization	Silver (Ag)	7440-22-4		0.230	mg	10017	3194
Die attach	M-011 Other inorganic materials	1.375	mg	supplier	glue	Silver (Ag)	7440-22-4		1.169	mg	850182	16236
				supplier	glue	Carbocyclic acrylate	proprietary		0.137	mg	99636	1903
				supplier	glue	2-Propenoic acid, 2-methylhexahydro-4,7-me	68586-19-6		0.062	mg	45091	861
				supplier	glue	2-(3,4-Epoxy)cyclohexylethyltrimethoxysilane	3388-04-3		0.007	mg	5091	97
Bonding wire	M-008 Precious metals	0.618	mg	supplier	wire	Gold (Au)	7440-50-8		0.618	mg	1000000	8583
Encapsulation	M-011 Other inorganic materials	38.054	mg	supplier	mold compound	Solid Epoxy Resin-1	Proprietary		0.761	mg	19998	10569
				supplier	mold compound	Solid Epoxy Resin-2	Proprietary		0.761	mg	19998	10569
				supplier	mold compound	Phenol resin	Proprietary		1.522	mg	39996	21139
				supplier	mold compound	Amorphous Silica	60676-86-0		33.869	mg	890025	470403
				supplier	mold compound	Carbon Black	1333-86-4		0.190	mg	4992	2639
				supplier	mold compound	Crystalline silica	14808-60-7		0.951	mg	24991	13208
connections coating	Solder	1.624	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.624	mg	1000000	22556