



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 *	2018-06-28
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	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

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
L9966CB-TR	BAES*UR63CBP	A	ZY1A	2018-06-28
	Amount	UoM	Unit type	ST ECOPACK Grade
	140	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7x7x1	48	flat	
Comment	Package: TQFP 48 7x7x1.0 1.0 Exp Pad Down			

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			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product

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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	BAE5*UR63CBP					
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	11.714	mg	supplier	die	Silicon (Si)	7440-21-3		10.641	mg	908369	76007
				supplier	metallization	Copper (Cu)	7440-50-8		0.725	mg	61890	5179
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	86	7
				supplier	metallization	Platinum (Pt)	7440-06-4		0.045	mg	3841	321
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	85	7
				supplier	metallization	Tungsten (W)	7440-33-7		0.034	mg	2902	243
				supplier	Passivation	Silicon Nitride	12033-89-5		0.029	mg	2476	207
				supplier	Passivation	Silicon Oxide	7631-86-9		0.116	mg	9902	829
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.122	mg	10449	874
				supplier								
Leadframe	Copper and its alloy	45.713	mg	supplier	alloy	Copper (Cu)	7440-50-8		43.450	mg	950495	310357
				supplier	alloy	Iron (Fe)	7439-89-6		1.070	mg	23407	7643
				supplier	alloy	Phosphorous (P)	12185-10-3		0.014	mg	307	100
				supplier	alloy	Zinc (Zn)	7440-66-6		0.053	mg	1159	373
				supplier	metallization	Silver (Ag)	7440-22-4		1.126	mg	24632	8043
				supplier	glue	Silver(Ag)	7440-22-4		1.485	mg	664728	10607
Die Attach	Other organic materials	2.234	mg	supplier	glue	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.123	mg	55058	879
				supplier	glue	Dihydro-3-(tetrapropenyl)-2,5-furandione	26544-38-7		0.123	mg	55058	879
				supplier	glue	Epoxy resin	25068-38-6		0.123	mg	55058	879
				supplier	glue	Dodecyclohexane	3234-28-4		0.123	mg	55058	879
				supplier	glue	Hexahydro-5-methyl-1,3-isobenzofurandione	19438-60-9		0.123	mg	55058	879
				supplier	glue	2,2'-(1,4-Butanediylbis(oxyethylene))bis[oxirane]	2425-79-8		0.123	mg	55058	879
				supplier	glue	Copper monoxide	1317-38-0		0.011	mg	4924	79
				supplier								
Bonding wires	Other inorganic materials	1.772	mg	supplier	wire	Copper (Cu)	7440-50-8		1.770	mg	998871	12643
				supplier	wire	Palladium (Pd)	7440-05-3		0.002	mg	1129	14
Encapsulation	Other inorganic materials	75.987	mg	supplier	mold compound	Epoxy Resin	25068-38-6		5.319	mg	69999	37993
				supplier	mold compound	Silica fused (SiO2) A	60676-86-0		54.711	mg	720005	390793
				supplier	mold compound	Silica fused (SiO2) B	7631-86-9		13.678	mg	180004	97700
				supplier	mold compound	Carbon Black	1333-86-4		0.380	mg	5001	2714
				supplier	mold compound	Phenol Resin	29690-82-2		1.899	mg	24991	13564
Finishing	Other organic materials	2.580	mg	supplier	coating	Tin (Sn)	7440-31-5		2.580	mg	1000000	18429