



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-05-05
Company Unique ID	NL 008751171B01		
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 *	giovanni giacopello	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
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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
L9780TR	BA5B*UK21AC1	A	959	2020-05-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	180	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		
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	CD00309262	



Package Designator	Size	Nbr of instances	Shape	
QFP	7.00,7.00,1.40	48	gull wing	
Comment	LQFP 48 7x7x1.4 1. MDF valid for CPs: L9780,L9780TR			

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 3rd January 2020			
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	1.85	die - leadframe	10267

QueryList : REACH-16th January 2020				
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 :						Mfr Item Name	BASB*UK21AC1					
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	M-011 Other inorganic materials	14.962	mg	supplier	die	Silicon(Si)	7440-21-3		14.353	mg	959297	79739
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.095	mg	6349	529
				supplier	metallisation	Tungsten(W)	7440-33-7		0.150	mg	10025	833
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.023	mg	1538	128
				supplier	passivation	Silicon oxide	7631-86-9		0.230	mg	15372	1278
				supplier	polymer coating	PIX1 Gamma-butyrolactone	96-48-0		0.111	mg	7419	617
Leadframe	M-004 Copper and its alloys	59.196	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		56.868	mg	960673	315933
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		1.848	mg	31218	10267
				supplier	alloy & coating	Magnesium(Mg)	7439-95-4		0.089	mg	1503	494
				supplier	alloy & coating	Silicon(Si)	7440-21-3		0.384	mg	6487	2133
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.006	mg	102	33
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.001	mg	17	6
Die attach		2.265	mg	supplier	glue or tape (choose)	Silver(Ag)	7440-22-4		2.020	mg	891832	11222
				supplier	glue or tape	Isobornyl Methacrylate	7534-94-3		0.159	mg	70199	883
				supplier	glue or tape	Bismaleimide resin	proprietary		0.068	mg	30022	378
				supplier	glue or tape	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.018	mg	7947	100
Bonding wires	M-008 Precious metals	1.013	mg	supplier	wire	Gold(Au)	7440-57-5		1.012	mg	999013	5622
	M-004 Copper and its alloys			supplier	wire	Copper(Cu)	7440-50-8		0.001	mg	987	6
Encapsulation	M-011 Other inorganic materials	102.564	mg	supplier	mold compound	Silica vitreous	60676-86-0		89.333	mg	870998	496294
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.205	mg	79999	45583
				supplier	mold compound	Phenol resin	26834-02-6		4.103	mg	40004	22794
				supplier	mold compound	Carbon black	1333-86-4		0.513	mg	5001	2850
				supplier	mold compound	Bismuth compound	7440-69-9		0.410	mg	3998	2278