



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2019-11-27
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 Giapello	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


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
STAC1011-500	7L4F*IV5DLI1	A	64BA	2019-11-27
	Amount	UoM	Unit type	ST ECOPACK Grade
	2580	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	250	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Ceramic		

Package Designator	Size	Nbr of instances	Shape	
DIM	20.70 - 9.9 - 4.3	4	flat	
Comment	Package: STAC780-4F			

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 13th September 2019			
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	10.90	Header	4225

QueryList : REACH-16th July 2019				
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	7L4F*IV5DU1					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	7.529	mg	supplier	die	Silicon (Si)	7440-21-3		6.856	mg	910612	2657
				supplier	metallization	Aluminium (Al)	7429-90-5		0.199	mg	26431	77
				supplier	metallization	Copper (Cu)	7440-50-8		0.003	mg	398	1
				supplier	Passivation	Silicon Nitride	12033-89-5		0.180	mg	23908	70
				supplier	Passivation	Silicon Oxide	7631-86-9		0.278	mg	36924	108
				supplier	back side metallization	Gold (Au)	7440-57-5		0.013	mg	1727	5
Header	M-004 Copper and its alloys	2231.562	mg	supplier	alloy	Copper (Cu)	7440-50-8		151.900	mg	68069	58876
				supplier	metallization	Nickel (Ni)	7440-02-0		2.900	mg	1300	1124
				supplier	metallization	Palladium (Pd)	7440-05-3		0.300	mg	134	116
				supplier	metallization	Gold (Au)	7440-57-5		0.002	mg	1	1
				supplier	Ceramic	Liquid Crystal Polymer	Proprietary		77.100	mg	34550	29884
				supplier	Ceramic	Glass	Proprietary		51.400	mg	23033	19922
				supplier	Ceramic	Adhesive	Proprietary		4.400	mg	1971	1705
				supplier	Flange	Copper (Cu)	7440-50-8		997.760	mg	447113	386729
				supplier	Flange	Molybdenum (Mo)	7440-57-5		919.800	mg	412178	356512
				supplier	Flange plating	Nickel (Ni)	7440-02-0		8.000	mg	3585	3101
				supplier	Flange plating	Gold (Au)	7440-57-5		18.000	mg	8066	6977
				supplier	wire	Aluminium (Al)	7429-90-5		0.702	mg	990127	272
Lid	M-011 Other inorganic materials	340.200	mg	supplier	wire	Silicium (Si)	7440-21-3		0.007	mg	9873	3
				supplier	Ceramic	Liquid Crystal Polymer	Proprietary		213.300	mg	626984	82674
				supplier	Ceramic	Glass	Proprietary		114.900	mg	337743	44535
				supplier	Ceramic	Adhesive	Proprietary		12.000	mg	35273	4651