



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 *	2022-12-10
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 *	Material Declaration champion	Representative Title	Material Declaration 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	<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 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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM8L151G4U3	84MB*764XXXY	A	998Z	2022-12-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	23.70	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 ; if coating is used or other bulk termination : add in comments	Nickel/Palladium/Gold (Ni/Pd/Au), ENI	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	4x4x0.55	28	flat	
Comment	Package : A0B0 UFQFPN 4X4X0.55 28L PITCH0.5 COL 8202209			

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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 : REACH-10 Jun 2022				
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	84M8*764000Y				4999999.0	1000000.3
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	1.886	mg	supplier	die	Silicon (Si)	7440-21-3		1.747	mg	926299	73712
				supplier	metallization	Aluminium (Al)	7429-90-5		0.012	mg	6363	506
				supplier	metallization	Copper (Cu)	7440-50-8		0.040	mg	21209	1688
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.005	mg	2651	211
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	3181	253
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	5832	464
				supplier	Passivation	Silicon Oxide	7631-86-9		0.065	mg	34464	2743
Die Attach Epoxy_ HR-5104-25_SD	M-011 Other inorganic materials	0.594	mg	Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.057	mg	95238	2388
				Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.085	mg	142857	3581
				Supplier	Organic Compounds	Phenol Resin	Trade Secret		0.085	mg	142857	3581
				Supplier	Organic Compounds	SiO2 Filler	Trade Secret		0.283	mg	476190	11938
				Supplier	Metals	(Meta)Acrylic Copolymer	Trade Secret		0.085	mg	142857	3581
Mold Compound_ EME-G770HCD	M-011 Other inorganic materials	9.147	mg	Supplier	Organic Compounds	Epoxy Resin	Trade Secret		0.102	mg	11000	4310
				Supplier	Organic Compounds	Phenol Resin	Trade Secret		0.102	mg	11000	4310
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		7.721	mg	846450	325791
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		1.164	mg	125320	49103
GOLD WIRE AU HA3 TYPE_HERAEUS	Bonding Wire	0.193	mg	Supplier	Organic Compounds	Carbon Black	1333-86-4		0.058	mg	6230	2441
				Supplier	Metals	Gold	7440-57-5		0.193	mg	1000000	8142
				Supplier	Metals	Copper	7440-50-8		11.478	mg	966120	484273
Leadframe_C7025+Ni/Pd/Au-Ag_HDI	Copper & its alloys	11.880	mg	Supplier	Metals	Nickel	7440-02-0		0.353	mg	29750	14912
				Supplier	Metals	Silicon	7440-21-3		0.031	mg	2600	1303
				Supplier	Metals	Magnesium	7439-95-4		0.014	mg	1150	576
				Supplier	Metals	Silver	7440-22-4		0.001	mg	80	40
				Supplier	Metals	Gold	7440-57-5		0.001	mg	100	50
				Supplier	Metals	Palladium	7440-05-3		0.002	mg	200	100