



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 *	28-10-2023
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


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
STM32U5A5RJT6	E15W*481XXX	A	9991	28-10-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	349.70	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	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10	64	L bend	
Comment	Package : 5W LQFP 64 10x10x1.4 1 0051434			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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-14th June 2023				
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	E15W*481XXXX				9999999.0	999996.7
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	26.299	mg	supplier	die	Silicon (Si)	7440-21-3		25.288	mg	961557	72313
				supplier	metallization	Aluminium (Al)	7429-90-5		0.112	mg	4259	320
				supplier	metallization	Copper (Cu)	7440-50-8		0.333	mg	12662	952
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	38	3
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.057	mg	2167	163
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	532	40
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	76	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.080	mg	3042	229
				supplier	Passivation	Silicon Oxide	7631-86-9		0.412	mg	15666	1178
				Leadframe (C7025 + Ag)	Copper & its alloys	100.000	mg	Supplier	Leadframe	Copper (Cu)	7440-50-8	
Supplier	Leadframe	Nickel (Ni)	7440-02-0						3.100	mg	31000	8865
Supplier	Leadframe	Silicon (Si)	7440-21-3						1.200	mg	12000	3432
Supplier	Leadframe	Magnesium (Mg)	7439-95-4						0.300	mg	3000	858
Supplier	Leadframe	Silver (Ag)	7440-22-4						3.500	mg	35000	10009
DAF (FH-900)	Precious metals	2.800	mg	Supplier	Glue or tape	Epoxy Resin	Proprietary		0.336	mg	120000	961
				Supplier	Glue or tape	Phenol Resin	Proprietary		0.364	mg	130000	1041
				Supplier	Glue or tape	SiO2 Filler	Proprietary		0.140	mg	50000	400
				Supplier	Glue or tape	(Meta)Acrylic	Proprietary		1.960	mg	700000	5605
Bonding wire (Au)	Precious metals	1.100	mg	Supplier	Bonding wire	Gold (Au)	7440-57-5		1.087	mg	988500	3109
				Supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.013	mg	11500	36
				Supplier	Molding Compound	2,2'-(3,3',5,5'-Tetramethyl-(1,1'-biphenyl))-4,4'	85954-11-6		8.228	mg	40000	23529
Encapsulation (EME-G631SH)	M-011 Other inorganic materials	205.700	mg	Supplier	Molding Compound	Epoxy resin	Proprietary		4.114	mg	20000	11764
				Supplier	Molding Compound	Phenol Resin	Proprietary		15.428	mg	75000	44116
				Supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		145.944	mg	709500	417341
				Supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		30.855	mg	150000	88233
				Supplier	Molding Compound	Carbon black	1333-86-4		1.131	mg	5500	3235
External Plating (Sn)	M-011 Other inorganic materials	13.800	mg	Supplier	Matte Sn	Tin (Sn)	7440-31-5		13.799	mg	999900	39458
				Supplier	Matte Sn	Impurities	-		0.001	mg	100	4