

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G031K4T3 STM32G031K4T3TR	2A5V*466XXXY	A	9991	21-11-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	180.00	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	7x7	32	L bend	
Comment	Package : 5V LQFP 32 7x7x1.4 1 0060661			

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	2ASV*466XXX				6000001.0	1000001.0
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	3.600	mg	supplier	die	Silicon (Si)	7440-21-3		3.460	mg	961111	19222
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	1944	39
				supplier	metallization	Copper (Cu)	7440-50-8		0.059	mg	16389	328
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.019	mg	5278	106
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	278	6
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	278	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.015	mg	4167	83
Leadframe (C7025 + Ag)	Copper & its alloys	72.000	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	10556	211
					Leadframe	Copper (Cu)	7440-50-8		68.940	mg	957500	383000
					Leadframe	Nickel (Ni)	7440-02-0		2.146	mg	29800	11920
					Leadframe	Silicon (Si)	7440-21-3		0.468	mg	6500	2600
Glue epoxy (EN-4900G)	Precious metals	0.700	mg		Leadframe	Magnesium (Mg)	7439-95-4		0.108	mg	1500	600
					Leadframe	Silver (Ag)	7440-22-4		0.338	mg	4700	1880
					Glue or tape	Silver	7440-22-4		0.553	mg	790000	3072
					Glue or tape	Cresol Novolac Epoxy Resins	Proprietary		0.018	mg	25000	97
					Glue or tape	Bisphenol A Diacrylate	Proprietary		0.035	mg	50000	194
					Glue or tape	Dicyclopentenyl group containing Acrylate	Proprietary		0.039	mg	55000	214
					Glue or tape	Butadiene copolymer	Proprietary		0.007	mg	10000	39
					Glue or tape	Polybutadiene epoxidized derivative	Proprietary		0.039	mg	55000	214
					Glue or tape	Peroxy Ketals	Proprietary		0.004	mg	5000	19
					Glue or tape	Substitutedalkoxyalkyl trimethoxysilane	Proprietary		0.004	mg	5000	19
Bonding wire (Cu)	Precious metals	0.300	mg		Glue or tape	Methacrylate multialkoxy substitutedalkyl ester	Proprietary		0.004	mg	5000	19
					Bonding wire	Copper	7440-50-8		0.290	mg	965500	1609
					Bonding wire	Palladium	7440-05-3		0.009	mg	31000	52
Encapsulation (EME-G6315H)	M-011 Other inorganic materials	99.000	mg		Bonding wire	Golden	7440-57-5		0.001	mg	3500	6
					Molding Compound	2,2'-(3,3',5,5'-Tetramethyl-(1,1'-biphenyl)-4,4'	85954-11-6		3.960	mg	40000	22000
					Molding Compound	Epoxy resin	Proprietary		1.980	mg	20000	11000
					Molding Compound	Phenol Resin	Proprietary		7.425	mg	75000	41250
					Molding Compound	Silica(Amorphous) A	60676-86-0		70.241	mg	709500	390225
External Plating (Sn)	M-011 Other inorganic materials	4.400	mg		Molding Compound	Silica(Amorphous) B	7631-86-9		14.850	mg	150000	82500
					Molding Compound	Carbon black	1333-86-4		0.545	mg	5500	3025
					Matte Sn	Tin (Sn)	7440-31-5		4.400	mg	999900	24442
	Matte Sn	Impurities	-		0.000	mg	100	2				