

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G431C8T3	775B*468XXX	A	998Z	2024-04-01
	Amount	UoM	Unit type	ST ECOPACK Grade
	178.23	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	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7x7	48	L bend	
Comment	Package : 5B LQFP 48 7x7x1.4 1 0110596			

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	775B*468XXX				6000000.0	1000000.5
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	8.920	mg	#N/A	die	Silicon (Si)	7440-21-3		8.583	mg	962220	48158
				#N/A	metallization	Aluminium (Al)	7429-90-5		0.016	mg	1794	90
				#N/A	metallization	Copper (Cu)	7440-50-8		0.143	mg	16031	802
				#N/A	metallization	Tantalum (Ta)	7440-25-7		0.046	mg	5157	258
				#N/A	metallization	Titanium (Ti)	7440-32-6		0.002	mg	224	11
				#N/A	metallization	Tungsten (W)	7440-33-7		0.001	mg	112	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	4036	202
Glue epoxy (3230)	M-011 Other inorganic materials	1.196	mg	#N/A	Passivation	Silicon Oxide	7631-86-9		0.093	mg	10426	522
				Supplier	Metals	Silver (Ag)	7440-22-4		0.974	mg	815000	5465
				Supplier	Plastics/polymers	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.036	mg	30000	202
				Supplier	Organic Compounds	Dihydro-3-(tetrapropenyl)furan-2,5-dione	26544-38-7		0.036	mg	30000	202
				Supplier	Organic Compounds	Epoxy resin	Proprietary		0.036	mg	30000	202
				Supplier	Organic Compounds	Dodecylloxirane	3234-28-4		0.036	mg	30000	202
				Supplier	Organic Compounds	Hexahydromethylphthalic anhydride	25550-51-0		0.036	mg	30000	202
Encapsulation (EME-G631SHQ)	M-011 Other inorganic materials	116.365	mg	Supplier	Organic Compounds	Epoxy resin modifier	Proprietary		0.036	mg	30000	202
				Supplier	Metallic compounds	Copper oxide	1317-38-0		0.006	mg	5000	34
				Supplier	Plastics/polymers	Epoxy Resin A	Proprietary		2.444	mg	21000	13713
				Supplier	Plastics/polymers	Epoxy Resin B	Proprietary		2.444	mg	21000	13713
				Supplier	Plastics/polymers	Phenol Resin	Proprietary		6.516	mg	56000	36560
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		90.817	mg	780450	509558
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		13.419	mg	115320	75292
Bonding Wire (Au)	Bonding Wire	0.663	mg	Supplier	Non-metals	Carbon Black	1333-86-4		0.725	mg	6230	4068
				Supplier	Metals	Gold (Au)	7440-57-5		0.663	mg	1000000	3720
External plating (Sn)	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin (Sn)	7440-31-5		1.078	mg	1000000	6048
				Supplier	Metals	Copper (Cu)	7440-50-8		48.617	mg	972243	272781
Leadframe (C194 + Ag)	Copper & its alloys	50.005	mg	Supplier	Metals	Iron (Fe)	7439-89-6		1.135	mg	22698	6368
				Supplier	Metals	Zinc (Zn)	7440-66-6		0.075	mg	1500	421
				Supplier	Non-Metals	Phosphorus (P)	7723-14-0		0.015	mg	300	84
				Supplier	Metals	Silver (Ag)	7440-22-4		0.163	mg	3260	915