

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G051K6U6	72MG*456XXXZ	A	998Z	21-11-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	48.64	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	
QFN	5x5x0.55	32	flat	
Comment	Package : A0B8 UFQFPN 5X5X0.55 32L 0.5 MM PITCH 8202208			

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	72MG*456XXXZ				5999999.0	1000006.9
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	1.692	mg	Supplier	die	Silicon (Si)	7440-21-3		1.531	mg	904846	31475
				Supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	4728	164
				Supplier	metallization	Copper (Cu)	7440-50-8		0.068	mg	40189	1398
				Supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	13002	452
				Supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	591	21
				Supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	591	21
				Supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	10047	349
				Supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	26005	905
				Glue Epoxy (EN4900GC)	M-011 Other inorganic materials	0.566	mg	Supplier	Organic Compounds	Acrylic resin	Proprietary	
Supplier	Organic Compounds	Polybutadiene derivative	Proprietary						0.011	mg	20000	233
Supplier	Organic Compounds	Butadiene copolymer	Proprietary						0.008	mg	15000	175
Supplier	Organic Compounds	Acrylate	Proprietary						0.031	mg	54000	629
Supplier	Organic Compounds	Epoxy resin	Proprietary						0.017	mg	30000	349
Supplier	Organic Compounds	Peroxide	Proprietary						0.005	mg	8000	93
Supplier	Organic Compounds	Additive	Proprietary						0.010	mg	18000	210
Supplier	Metals	Silver	7440-22-4						0.445	mg	785000	9139
Encapsulation (EME-G770)	M-011 Other inorganic materials	17.095	mg					Supplier	Plastics/polymers	Epoxy Resin A	Proprietary	
				Supplier	Plastics/polymers	Epoxy Resin B	Proprietary		0.359	mg	21000	7380
				Supplier	Plastics/polymers	Phenol Resin A	Proprietary		0.359	mg	21000	7380
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		13.342	mg	780450	274282
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		1.971	mg	115320	40528
				Supplier	Non-metals	Carbon Black	1333-86-4		0.107	mg	6230	2189
				Supplier	Metals Compounds	Metal Hydroxide	Proprietary		0.239	mg	14000	4920
				Supplier	Plastics/polymers	Phenol Resin B	Proprietary		0.359	mg	21000	7380
Bonding Wire (Au)	Bonding Wire	0.370	mg	Supplier	Metals	Gold	7440-57-5		0.370	mg	1000000	7615
Plating (Sn)	M-011 Other inorganic materials	0.719	mg	Supplier	Metals	Tin	7440-31-5		0.719	mg	1000000	14780
Leadframe (C7025 + Ag)	Copper & its alloys	28.200	mg	Supplier	Metals	Copper	7440-50-8		25.863	mg	917140	531705
				Supplier	Metals	Nickel	7440-02-0		0.635	mg	22500	13044
				Supplier	Metals	Silicon	7440-21-3		0.073	mg	2600	1507
				Supplier	Metals	Magnesium	7439-95-4		0.032	mg	1150	667
				Supplier	Metals	Silver (Ag)	7440-22-4		1.596	mg	56610	32819