


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G051G8U3 STM32G051G8U3TR	74MB*456XXXZ	A	998Z	2023-04-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	24.05	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	Nickel/Palladium/Gold (Ni/Pd/Au)	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-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-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	74MB*456XXXZ				4999999.0	1000002.1				
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	63669				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.008	mg	4728	333				
				supplier	metallization	Copper (Cu)	7440-50-8		0.068	mg	40189	2828				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	13002	915				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	591	42				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	591	42				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.017	mg	10047	707				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	26005	1830				
				DAF (HR-5104)	M-011 Other inorganic materials	0.566	mg	Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.054	mg	95238	2243
								Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.081	mg	142857	3364
Supplier	Organic Compounds	Phenol Resin	Trade Secret						0.081	mg	142857	3364				
Supplier	Organic Compounds	SiO2 Filler	7631-86-9						0.270	mg	476190	11215				
Supplier	Metals	(Meta)Acrylic Copolymer	Trade Secret						0.081	mg	142857	3364				
Encapsulation (G770HCD)	M-011 Other inorganic materials	9.344	mg	Supplier	Plastics/polymers	Epoxy Resin	Trade Secret		0.196	mg	21000	8160				
				Supplier	Plastics/polymers	Phenol Resin	Trade Secret		0.196	mg	21000	8160				
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		7.816	mg	836450	325029				
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		1.078	mg	115320	44811				
				Supplier	Non-metals	Carbon Black	1333-86-4		0.058	mg	6230	2421				
Bonding Wire (Au)	Bonding Wire	0.244	mg	Supplier	Metals	Gold	7440-57-5		0.244	mg	1000000	10152				
Leadframe (C7025 + NiPdAu)	Copper & its alloys	12.200	mg	Supplier	Metals	Silicon	7440-21-3		0.031	mg	2500	1268				
				Supplier	Metals	Copper	7440-50-8		11.712	mg	960000	487058				
				Supplier	Metals	Magnesium	7439-95-4		0.024	mg	2000	1015				
				Supplier	Metals	Nickel	7440-02-0		0.422	mg	34600	17554				
				Supplier	Metals	Gold	7440-57-5		0.002	mg	200	101				
				Supplier	Metals	Silver	7440-22-4		0.002	mg	200	101				
				Supplier	Metals	Palladium	7440-05-3		0.006	mg	500	254				