




Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32WL54JCI6	E8JB*497XXXY	A	9991	2023-04-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	30.85	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	NAC	Copper Alloy	96.5Sn/3.5Ag	

Package Designator	Size	Nbr of instances	Shape	
BGA	5x5	73	bulk solder	
Comment	Package : B08E UFBGA 5X5X0.6 73L P0.5 9X9 DM00488486			

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	E8JB*497XXXY				6000000.0	1000000.3
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	2.288	mg	supplier	die	Silicon (Si)	7440-21-3		1.843	mg	805507	59743
				supplier	metallization	Aluminium (Al)	7429-90-5		0.021	mg	9178	681
				supplier	metallization	Copper (Cu)	7440-50-8		0.188	mg	82168	6094
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	437	32
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.061	mg	26661	1977
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	874	65
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	874	65
				supplier	Passivation	Silicon Nitride	12033-89-5		0.048	mg	20979	1556
				supplier	Passivation	Silicon Oxide	7631-86-9		0.122	mg	53322	3955
				Substrate (A265590)	M-011 Other inorganic materials	9.963	mg	supplier	BT-substrate	Thermosetting resin (Inorganic filler)	Proprietary	
supplier	BT-substrate	Glass cloth	65997-17-3						3.696	mg	371000	119818
supplier	BT-substrate	Copper foil	7440-50-8						4.553	mg	457000	147593
supplier	Solder mask	2-benzyl-2-dimethylamino-4-morpholinobutyro	119313-12-1						0.354	mg	35500	11465
supplier	Solder mask	Propanol, 1(or 2)-(2-methoxymethylethoxy)-	34590-94-8						0.364	mg	36500	11788
supplier	Solder mask	Solvent naphtha (petroleum), heavy arom.	64742-94-5						0.334	mg	33500	10819
supplier	Solder mask	Copper,[29H,31H-phthalocyaninato(2-)-]kappa	147-14-8						0.065	mg	6500	2099
supplier	film	Butadiene, acrylonitrile polymer, carboxy-term	68610-41-3						2.296	mg	686250	74411
supplier	film	Formaldehyde, polymer with (chloromethyl)ox	37382-79-9						0.859	mg	256850	27851
supplier	film	Dapsone	80-08-0						0.123	mg	36900	4001
DAF (ATB-125)	M-011 Other inorganic materials	3.345	mg	supplier	film	[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	2530-83-8		0.033	mg	10000	1084
				supplier	film	Reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6		0.033	mg	10000	1084
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.273	mg	1000000	8850
				supplier	Molding Compound	Epoxy resin	Proprietary		0.528	mg	40000	17122
Encapsulation (KE-G1250AAS)	M-011 Other inorganic materials	13.205	mg	supplier	Molding Compound	Silica(Fused)	60676-86-0,7631-86-9		11.885	mg	900000	385247
				supplier	Molding Compound	Phenol resin	Proprietary		0.739	mg	56000	23971
				supplier	Molding Compound	Carbon Black	1333-86-4		0.053	mg	4000	1712
Solder balls (96.5Sn/3.5Ag)	Solder	1.775	mg	supplier	Solder	Tin (Sn)	7440-31-5		1.712	mg	964500	55496
				supplier	Solder	Silver(Ag)	7440-22-4		0.063	mg	35500	2043