


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L052R8H6	U3R8*417XXXX	A	959	2018-04-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	64.00	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	
NAC	Tin/Silver/Copper (Sn/Ag/Cu)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	5x5x1.2	64	No lead	
Comment	Package : R8 TFBGA 5x5x1.2 64 F8x8 0.5 7132897			

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-27th June 2018				
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	U3R8*417XXX				5999998.0	1000018.0
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	4.675	mg	supplier	die	Silicon (Si)	7440-21-3		4.463	mg	954652	69734
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	4064	297
				supplier	metallization	Copper (Cu)	7440-50-8		0.062	mg	13262	969
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.007	mg	1497	109
				supplier	metallization	Titanium (Ti)	7440-32-6		0.009	mg	1925	141
				supplier	Passivation	Silicon Nitride	12033-89-5		0.016	mg	3422	250
				supplier	Passivation	Silicon Oxide	7631-86-9		0.099	mg	21176	1547
				supplier	core+ fiber glass	Bismaleimide (B)	13676-54-5		0.774	mg	45252	12100
				supplier	core+ fiber glass	Triazine (T)	25722-66-1		0.774	mg	45252	12100
				supplier	core+ fiber glass	Fiber glass	65997-17-3		2.310	mg	134990	36094
Substrate	M-011 Other inorganic materials	17.112	mg	supplier	core+ fiber glass	metal hydroxide	21645-51-2		0.053	mg	3068	820
				supplier	core+ fiber glass	Zinc hydroxide	20427-58-1		0.016	mg	920	246
				supplier	core+ fiber glass	Proprietary	Proprietary		1.297	mg	75778	20262
				supplier	core+ fiber glass	Calcium sulfate	7778-18-9		0.026	mg	1534	410
				supplier	solder mask	Baryum sulfate	7727-43-7		0.243	mg	14199	3796
				supplier	solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		0.040	mg	2366	633
				supplier	solder mask	Talc containing no asbestiform fibers	14807-96-6		0.135	mg	7888	2109
				supplier	solder mask	Quartz	14808-60-7		0.135	mg	7888	2109
				supplier	solder mask	Acrylates derivative	407-47-6		0.559	mg	32657	8732
				supplier	solder mask	aromatic hydrocarbon	Proprietary		0.054	mg	3155	844
				supplier	solder mask	amine compound	Proprietary		0.008	mg	473	127
				supplier	coating	Copper (Cu)	7440-50-8		10.586	mg	618639	165413
				supplier	coating	Nickel (Ni)	7440-02-0		0.080	mg	4696	1256
				supplier	coating	Gold (Au)	7440-57-5		0.021	mg	1244	333
				supplier	glue or tape	Silver (Ag)	7440-22-4		2.085	mg	889400	32571
				supplier	glue or tape	Neopentyl glycol dimethacrylate	1985-51-9		0.117	mg	50000	1831
				supplier	glue or tape	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.129	mg	55000	2014
				supplier	glue or tape	palmitic acid	57-10-3		0.002	mg	1000	37
supplier	glue or tape	4-tert-butylcyclohexanol	98-52-2		0.007	mg	3000	110				
supplier	glue or tape	Hexamethyltetracosane-hexaene	111-02-4		0.002	mg	1000	37				
supplier	glue or tape	Fluorine trace	14762-94-8		0.001	mg	600	22				
Wires	M-011 Other inorganic materials	0.351	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.351	mg	1000000	5483
Encapsulation	M-011 Other inorganic materials	32.891	mg	supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		2.742	mg	83375	42849
				supplier	Moulding Compound	Phenol resin	205830-20-2		1.371	mg	41688	21424
				supplier	Moulding Compound	Quartz	14808-60-7		0.686	mg	20844	10712
				supplier	Moulding Compound	Silica, vitreous	1333-86-4		27.818	mg	845756	434658
				supplier	Moulding Compound	Carbon Black	1309-42-8		0.247	mg	7504	3856
				supplier	Moulding Compound	Magnesium dihydroxide	Proprietary		0.027	mg	834	428
Solder Balls	M-011 Other inorganic materials	6.627	mg	supplier	solder	Tin (Sn)	7440-31-5		6.513	mg	982700	101763
				supplier	solder	Silver (Ag)	7440-22-4		0.080	mg	12000	1243
				supplier	solder	Copper (Cu)	7440-50-8		0.033	mg	5000	518
				supplier	solder	Nickel (Ni)	7440-02-0		0.001	mg	200	21
				JIG-R	solder	Lead (Pb)	7439-92-1		0.001	mg	100	10