


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F051C8T6	E05B*440XXX1	B	9991	2018-03-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	180.00	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	
Tin	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7x7x1.4	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-12th January 2017				
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	E05B*440XXX1				6001500.0	974860.5
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	5.370	mg	supplier	die	Silicon (Si)	7440-21-3		5.151	mg	959218	28617
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	2793	83
				supplier	metallization	Copper (Cu)	7440-50-8		0.074	mg	13780	411
				supplier	metallization	Cobalt (Co)	7440-48-4		0.014	mg	2607	78
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	745	22
				supplier	metallization	Tungsten (W)	7440-33-7		0.008	mg	1490	44
				supplier	Passivation	Silicon Nitride	12033-89-5		0.010	mg	1862	56
				supplier	Passivation	Silicon Oxide	7631-86-9		0.094	mg	17505	522
Sumitomo G631SH	M-011 Other inorganic materials	104.526	mg	supplier	Molding Compound	Epoxy Resin A	Proprietary		1.000	mg	10000	5556
				supplier	Molding Compound	Epoxy Resin B	Proprietary		1.000	mg	10000	5556
				supplier	Molding Compound	Phenol Resin	Proprietary		2.300	mg	23000	12778
				supplier	Molding Compound	Carbon Black	1333-86-4		0.300	mg	3000	1667
				supplier	Molding Compound	Silica Fused	60676-86-0		84.526	mg	800000	444444
				supplier	Molding Compound	Silica Fused	7631-86-9		15.000	mg	150000	83333
				supplier	Molding Compound	Silica, crystalline *	14808-60-7		0.400	mg	4000	2222
Leadframe	M-011 Other inorganic materials	62.000	mg	supplier	Leadframe	Nickel	7440-02-0		1.915	mg	30880	10636
				supplier	Leadframe	Silicon	7440-21-3		0.403	mg	6500	2239
				supplier	Leadframe	Magnesium	7439-95-4		0.097	mg	1565	539
				supplier	Leadframe	Silver	7440-22-4		3.906	mg	63000	21700
				supplier	Leadframe	Copper	7440-50-8		55.679	mg	898055	309330
				supplier	Leadframe	Silver Powder	7440-22-4		2.805	mg	850000	15583
Sumitomo CRM-1076WA	M-011 Other inorganic materials	3.305	mg	supplier	Epoxy	Epoxy Resin A	9003-36-5		0.182	mg	55000	1008
				supplier	Epoxy	Epoxy Resin B	Trade Secret		0.099	mg	30000	550
				supplier	Epoxy	Diluent A	Trade Secret		0.033	mg	10000	183
				supplier	Epoxy	Diluent B	Trade Secret		0.099	mg	30000	550
				supplier	Epoxy	Hardener	Trade Secret		0.066	mg	20000	367
				supplier	Epoxy	Dicyandiamide	461-58-5		0.008	mg	2500	46
				supplier	Epoxy	Organic peroxide	Proprietary		0.013	mg	4000	73
Wire	M-011 Other inorganic materials	0.400	mg	supplier	Wire	Gold	7440-57-5		0.400	mg	1000000	2222
Matte Sn	M-011 Other inorganic materials	4.400	mg	supplier	Matte Sn	Tin(Sn)	7440-31-5		4.400	mg	1000000	24444