


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F217IET6	Y31T*411XXX2	B	9991	2017-05-10
	Amount	UoM	Unit type	ST ECOPACK Grade
	1650.00	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 (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	24x24x1.4	176	L Bend	
Comment	Package : 1T LQFP 176 24x24x1.4 0110489			

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- 7th July 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	Y31T*411XXX2				5999999.0	1000002.0
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	13.728	mg	supplier	die	Silicon (Si)	7440-21-3		13.151	mg	957969	7970
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	2040	17
				supplier	metallization	Copper (Cu)	7440-50-8		0.244	mg	17774	148
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	73	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.079	mg	5755	48
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	219	2
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	146	1
				supplier	Passivation	Silicon Nitride	12033-89-5		0.062	mg	4516	38
				supplier	Passivation	Silicon Oxide	7631-86-9		0.158	mg	11509	96
				Encapsulation	M-011 Other inorganic materials	946.000	mg	supplier	Molding Compound	Epoxy Resin A	Proprietary	
	Molding Compound	Epoxy Resin B	Proprietary						41.840	mg	44228	25358
	Molding Compound	Phenol Resin	Proprietary						62.760	mg	66342	38036
	Molding Compound	Carbon Black	1333-86-4						4.184	mg	4423	2536
	Molding Compound	Silica Fused	60676-86-0						795.376	mg	840778	482046
Leadframe	M-011 Other inorganic materials	666.052	mg	supplier	Alloy	Copper (Cu)	7440-50-8		626.402	mg	940470	379638
					Alloy	Nickel (Ni)	7440-02-0		24.780	mg	37204	15018
					Alloy	Silicon (Si)	7440-21-3		5.370	mg	8062	3255
					Alloy	Silver (Ag)	7440-22-4		8.260	mg	12401	5006
					Alloy	Magnesium (Mg)	7439-95-4		1.240	mg	1862	752
Die Attach	M-011 Other inorganic materials	3.010	mg	supplier	Glue	Silver Flake	7440-22-4		2.330	mg	774086	1412
					Glue	Epoxy Acylate	15625-89-5		0.150	mg	49834	91
					Glue	Substituted Polyamine	68490-66-4		0.050	mg	16611	30
					Glue	Bisphenol F	28064-14-4		0.300	mg	99668	182
					Glue	2-Ethylhexyl glycidyl ether	2461-15-6		0.180	mg	59801	109
Bonding wire	M-011 Other inorganic materials	2.510	mg	supplier	Bonding wire	Au	7440-57-5		2.480	mg	988048	1503
					Bonding wire	Pd	7440-05-3		0.030	mg	11952	18
Finishing	M-011 Other inorganic materials	18.700	mg	supplier	Connection coating	Tin(Sn)	7440-31-5		18.700	mg	1000000	11333