




Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F031C6T6 STM32F031C6T6TR	M85B*444XXA	A	959	30-08-2018
	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	
NAC	NiPdAu	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-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 :						Mfr Item Name	M85B*444XXXA				7000003.0	999998.0
note : Substance present with less 0.001mg will not be declared in this document												
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	5.369	mg	supplier	die	Silicon (Si)	7440-21-3		5.150	mg	959210	28611
				supplier	metallization	Aluminium (Al)	7429-90-5		0.015	mg	2794	83
				supplier	metallization	Copper (Cu)	7440-50-8		0.074	mg	13783	411
				supplier	metallization	Cobalt (Co)	7440-48-4		0.014	mg	2608	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	1863	56
				supplier	Passivation	Silicon Oxide	7631-86-9		0.094	mg	17508	522
				supplier	alloy	Copper (Cu)	7440-50-8		72.936	mg	964855	405199
Lead-frame	M-011 Other inorganic materials	75.592	mg	supplier	alloy	Nickel (Ni)	7440-02-0		2.097	mg	27746	11652
				supplier	alloy	Silicium (Si)	7440-21-3		0.454	mg	6012	2525
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.105	mg	1387	583
				supplier	coating	Nickel (Ni)	7440-02-0		0.369	mg	914840	2048
Lead-frame Coating	M-011 Other inorganic materials	0.403	mg	supplier	coating	Palladium (Pd)	7440-05-3		0.012	mg	29660	66
				supplier	coating	Gold (Au)	7440-57-5		0.011	mg	27750	62
				supplier	coating	Silver (Ag)	7440-22-4		0.011	mg	27750	62
Die Attach	M-011 Other inorganic materials	1.954	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		1.505	mg	770000	8359
				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0.442	mg	226000	2454
				supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.008	mg	4000	43
Wires	M-011 Other inorganic materials	0.538	mg	supplier	Bonding wire	Silver (Ag)	7440-22-4		0.519	mg	965000	2884
				supplier	Bonding wire	Gold (Au)	7440-57-5		0.003	mg	5000	15
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.016	mg	30000	90
Encapsulation	M-011 Other inorganic materials	96.141	mg	supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		6.786	mg	70585	37700
				supplier	Moulding Compound	Phenol Resin	Proprietary		4.847	mg	50418	26929
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		83.732	mg	870931	465178
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.485	mg	5042	2693
				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.145	mg	1513	808
Finishing	M-011 Other inorganic materials	0.003	mg	supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.145	mg	1513	808
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.002	mg	914840	13
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	29660	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	27750	0
				supplier	connections coating	Silver (Ag)	7440-22-4		0.000	mg	27750	0