




Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F051C8U6	F1MI*440XXXB	A	P1C7	2018-09-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	97.48	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	7x7x0.55	48	No lead	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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	FIMI*440XXB			5999999.0	1000000.0	
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	4.370	mg	supplier	die	Silicon (Si)	7440-21-3		3.943	mg	902288	40451
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	6636	298
				supplier	metallization	Copper (Cu)	7440-50-8		0.145	mg	33181	1488
				supplier	metallization	Cobalt (Co)	7440-48-4		0.027	mg	6178	277
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1831	82
				supplier	metallization	Tungsten (W)	7440-33-7		0.016	mg	3661	164
				supplier	Passivation	Silicon Nitride	12033-89-5		0.019	mg	4348	195
				supplier	Passivation	Silicon Oxide	7631-86-9		0.183	mg	41876	1877
				Supplier	Metals	Silver (Ag)	7440-22-4		0.371	mg	800000	3807
				Supplier	Plastics/polymers	methylene diacrylate	42594-17-2		0.062	mg	134000	638
Die Attach Material	M-011 Other inorganic materials	0.464	mg	Supplier	Polymers	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.012	mg	25000	119
				Supplier	Organic Compounds	Polybutadiene Anhydride	Proprietary		0.014	mg	30000	143
				Supplier	Polymers	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.002	mg	5000	24
				Supplier	Organic Compounds	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.002	mg	5000	24
				Supplier	Metals	Palladium (Pd)	7440-05-3		0.000	mg	1000	5
				Supplier	Glass	silica vitreous	60676-86-0		30.531	mg	880000	313208
				Supplier	Epoxy Resin	Biphenyl epoxy resin	85954-11-6		1.735	mg	50000	17796
				Supplier	Phenol Resin	Phenolic resin	205830-20-2		1.353	mg	39000	13881
				Supplier	Epoxy Resin	Epoxy resin	Proprietary		0.694	mg	20000	7118
				Supplier	Additive	carbon black	1333-86-4		0.069	mg	2000	712
Bonding wire	M-011 Other inorganic materials	0.378	mg	Supplier	Metals	other	Proprietary		0.312	mg	9000	3203
				Supplier	Metals	Silver	7440-22-4		0.363	mg	960000	3726
				Supplier	Metals	Others	Proprietary		0.015	mg	40000	155
Leadframe	M-011 Other inorganic materials	53.878	mg	Supplier	Metals	Nickel	7440-02-0		1.582	mg	29365	16231
				Supplier	Metals	Silicon	7440-21-3		0.350	mg	6500	3593
				Supplier	Metals	Magnesium	7439-95-4		0.084	mg	1565	865
				Supplier	Metals	Silver	7440-22-4		3.394	mg	63000	34822
				Supplier	Metals	Copper	7440-50-8		48.467	mg	899570	497215
Leadframe coating	M-011 Other inorganic materials	3.693	mg	Supplier	Metals	Nickel (Ni)	7440-02-0		3.385	mg	916800	34731
				Supplier	Metals	Palladium (Pd)	7440-05-3		0.217	mg	58700	2224
				Supplier	Metals	Gold (Au)	7440-57-5		0.090	mg	24500	928