

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F765ZIT6	P41A*451XXXZ	A	9998	15-03-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	1315.000	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	
able; if coating is used or other bulk	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
LQFP	20x20x1.4	144		
Comment	Package : 1A LQFP 144 20X20X1.4 2 0099183			

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	P41A*451XXXZ				7000000.0	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	31.426	mg	supplier	die	Silicon (Si)	7440-21-3		29.844	mg	949660	22695
				supplier	metallization	Aluminium (Al)	7429-90-5		0.111	mg	3532	84
				supplier	metallization	Copper (Cu)	7440-50-8		0.719	mg	22879	547
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	64	2
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.100	mg	3182	76
				supplier	metallization	Tungsten (W)	7440-33-7		0.323	mg	10278	246
				supplier	Passivation	Silicon Nitride	12033-89-5		0.084	mg	2673	64
				supplier	Passivation	Silicon Oxide	7631-86-9		0.243	mg	7732	185
				supplier	ALLOY	Copper (Cu)	7440-50-8		240.736	mg	975000	183069
LEADFRAME (MHT- C194)	Copper and its alloy	246.909	mg	supplier	ALLOY	Iron (Fe)	7439-89-6		5.802	mg	23500	4412
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.296	mg	1200	225
				supplier	ALLOY	Metallic Phosphorus (P)	7723-14-0		0.074	mg	300	56
LEADFRAME (MHT - Ag Plating)	M-011 Other inorganic materials	1.640	mg	supplier	COATING	Silver(Ag)	7440-22-4		1.640	mg	1000000	1247
DIE ATTACH (Evertech - AP4200)	M-011 Other inorganic materials	4.398	mg	supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-36-5		0.704	mg	160000	535
				supplier	GLUE	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.066	mg	15000	50
				supplier	GLUE	Formaldehyde, oligomeric reaction products w	9003-35-4		0.066	mg	15000	50
				supplier	GLUE	2-butoxyethyl acetate	112-07-2		0.176	mg	40000	134
BONDING WIRE (Hesung - Au HTS)	M-011 Other inorganic materials	2.654	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		2.628	mg	990050	1998
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.026	mg	9900	20
				supplier	BONDING WIRE	Calcium (Ca)	7440-70-2		0.000	mg	50	0
ENCAPSULATION (Sumitomo - G631H)	M-011 Other inorganic materials	1020.115	mg	supplier	MOLDING COMPOUND	Epoxy Resin A	Trade Secret		20.434	mg	20000	15539
				supplier	MOLDING COMPOUND	Epoxy Resin B	85954-11-6		40.868	mg	40000	31078
				supplier	MOLDING COMPOUND	Silica Amorphous A	60676-86-0		800.450	mg	785000	608706
				supplier	MOLDING COMPOUND	Silica Amorphous B	7631-86-9		86.844	mg	85000	66041
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		5.108	mg	5000	3885
FINISHING (Sytron - Pure Tin)	M-011 Other inorganic materials	7.858	mg	supplier	MOLDING COMPOUND	Phenol Resin	Trade Secret		66.410	mg	65000	50502
				supplier	COATING	Tin (Sn)	7440-31-5		7.858	mg	1000000	5976