


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F302RBT6 STM32F302RBT6TR	S45W*422CCC1	A	998Z	25-09-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	357.42	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; if coating is used or other bulk termination	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10X10X1.4	64	L Bend	
Comment	Package : 5W LQFP 64 10x10x1.4 1 0051434			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	S45W*422CCC1				5999999.0	1000001.2
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	17.389	mg	supplier	die	Silicon (Si)	7440-21-3		16.637	mg	956754	46548
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2933	143
				supplier	metallization	Copper (Cu)	7440-50-8		0.255	mg	14664	713
				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2760	134
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	805	39
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1610	78
				supplier	Passivation	Silicon Nitride	12033-89-5		0.033	mg	1898	92
				supplier	Passivation	Silicon Oxide	7631-86-9		0.323	mg	18575	904
				Supplier	Metals	Silver	7440-22-4		2.131	mg	901000	5963
				Supplier	Organic Compounds	Highly cross-linked polymer	Proprietary		0.234	mg	99000	655
EMC_G631SHQ_Sumitomo	M-011 Other inorganic materials	238.279	mg	Supplier	Organic Compounds	Epoxy Resin A	Proprietary		5.004	mg	21000	14000
				Supplier	Organic Compounds	Epoxy Resin B	Proprietary		5.004	mg	21000	14000
				Supplier	Organic Compounds	Phenol Resin	Proprietary		13.344	mg	56000	37333
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		185.965	mg	780450	520302
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		27.478	mg	115320	76880
				Supplier	Additives	Carbon Black	1333-86-4		1.484	mg	6230	4153
BondingWire_Ag_MKE	Bonding Wire	0.446	mg	Supplier	Metals	Silver	7440-22-4		0.428	mg	960000	1199
				Supplier	Metals	Others	Proprietary		0.018	mg	40000	50
Anode Ball_Tin_Asahi	Metals	1.438	mg	Supplier	Metals	Tin	7440-31-5		1.438	mg	1000000	4023
Leadframe_C9+Ag_HDS	Metals	97.500	mg	Supplier	Metals	Iron	7439-89-6		2.132	mg	21865	5965
				Supplier	Non-metals	Phosphorus	7723-14-0		0.071	mg	730	199
				Supplier	Metals	Zinc	7440-66-6		0.110	mg	1125	307
				Supplier	Metals	Copper	7440-50-8		89.040	mg	913235	249122
				Supplier	Metals	Silver	7440-22-4		6.143	mg	63000	17186
				JIG-R	Metals	Lead	7439-92-1		0.004	mg	45	12