




Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L152RDT6	S05W*436XXX	A	998Z	2017-12-09
	Amount	UoM	Unit type	ST ECOPACK Grade
	356.02	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), matte	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-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	S05W*436XXX				6000001.0	0.0
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	20.396	mg	supplier	die	Silicon (Si)	7440-21-3		19.767	mg	969161	55522
				supplier	metallization	Aluminium (Al)	7429-90-5		0.055	mg	2697	154
				supplier	metallization	Copper (Cu)	7440-50-8		0.182	mg	8923	511
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.021	mg	1030	59
				supplier	metallization	Titanium (Ti)	7440-32-6		0.027	mg	1324	76
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	49	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.049	mg	2402	138
				supplier	Passivation	Silicon Oxide	7631-86-9		0.294	mg	14415	826
Die Attach Epoxy_ABLEBOND 3230_H	M-011 Other inorganic materials	1.377	mg	Supplier	Metals	Silver	7440-22-4		1.241	mg	901000	3485
				Supplier	Plastics/polymers	Highly cross-linked polymer	Proprietary		0.136	mg	99000	383
Mold Compound_EME-G631SHQ_Sur	M-011 Other inorganic materials	234.776	mg	Supplier	Plastics/polymers	Epoxy Resin A	Proprietary		5.146	mg	21000	14454
				Supplier	Plastics/polymers	Epoxy Resin B	Proprietary		5.146	mg	21000	14454
				Supplier	Plastics/polymers	Phenol Resin	Proprietary		13.723	mg	56000	38545
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		180.975	mg	780450	-491668
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		28.259	mg	115320	79375
Wire_AG Si TYPE_MKE	Bonding Wire	0.531	mg	Supplier	Non-metals	Carbon Black	1333-86-4		1.527	mg	6230	4288
				Supplier	Metals	Silver	7440-22-4		0.510	mg	960000	1432
				Supplier	Metals	Others	Proprietary		0.021	mg	40000	60
Plating anode_Pure Tin_Nuo Nengda	M-011 Other inorganic materials	1.438	mg	Supplier	Metals	Tin	7440-31-5		1.438	mg	1000000	4039
Leadframe_C194+Ag_HDS	Copper & its alloys	97.500	mg	Supplier	Metals	Iron	7439-89-6		2.132	mg	21865	5988
				Supplier	Non-metals	Phosphorus	7723-14-0		0.071	mg	730	200
				Supplier	Metals	Zinc	7440-66-6		0.110	mg	1125	308
				Supplier	Metals	Copper	7440-50-8		89.040	mg	913235	250101
				Supplier	Metals	Silver	7440-22-4		6.143	mg	63000	17253
				JIG-R	Metals	Lead	7439-92-1		0.004	mg	45	12