


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STR731FV0T7	A31L*403XXXY	A	1054	25-08-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	650.00	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	100	L Bend	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

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 :						Mfr Item Name	A31L*403XXY				6999998.0	1000003.0
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	25.872	mg	supplier	die	Silicon (Si)	7440-21-3		25.169	mg	972828	38722
				supplier	metallization	Aluminium (Al)	7429-90-5		0.101	mg	3904	155
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	77	3
				supplier	metallization	Titanium (Ti)	7440-32-6		0.027	mg	1044	42
				supplier	metallization	Tungsten (W)	7440-33-7		0.020	mg	773	31
				supplier	Passivation	Silicon Nitride	12033-89-5		0.057	mg	2203	88
Lead-frame	M-011 Other inorganic materials	134.439	mg	supplier	alloy	Silicon Oxide	7631-86-9		0.496	mg	19171	763
					alloy	Copper (Cu)	7440-50-8		131.011	mg	974500	201556
					alloy	Iron (Fe)	7439-89-6		3.081	mg	22920	4741
					alloy	Zinc (Zn)	7440-66-6		0.161	mg	1200	248
Lead-frame Coating	M-011 Other inorganic materials	0.559	mg	supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.186	mg	1380	285
					coating	Nickel (Ni)	7440-02-0		0.520	mg	930510	800
					coating	Palladium (Pd)	7440-05-3		0.021	mg	37710	32
Die Attach	M-011 Other inorganic materials	2.324	mg	supplier	coating	Gold (Au)	7440-57-5		0.018	mg	31780	27
					glue or soft solder	Silver (Ag)	7440-22-4		1.834	mg	789474	2822
					glue or soft solder	Acrylate	Proprietary		0.163	mg	70175	251
					glue or soft solder	Methacrylate	Proprietary		0.163	mg	70175	251
Wires	M-011 Other inorganic materials	1.670	mg	supplier	glue or soft solder	Acrylate	Proprietary		0.163	mg	70175	251
					Bonding wire	Gold (Au)	7440-57-5		1.653	mg	990000	2543
					Bonding wire	Palladium (Pd)	7440-05-3		0.017	mg	10000	26
Encapsulation	M-011 Other inorganic materials	485.132	mg	supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		35.068	mg	72285	53951
					Moulding Compound	Phenol Resin	Proprietary		25.048	mg	51632	38536
					Moulding Compound	Silica, vitreous	60676-86-0		417.501	mg	860593	642310
					Moulding Compound	Carbon-black	1333-86-4		2.505	mg	5163	3854
					Bismuth/Bismuth Compounds	Bismuth	7440-69-9		5.010	mg	10326	7707
Finishing	M-011 Other inorganic materials	0.006	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.005	mg	930510	8
					connections coating	Palladium (Pd)	7440-05-3		0.000	mg	37710	0
					connections coating	Gold (Au)	7440-57-5		0.000	mg	31780	0