


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM8L152C6U3	S4MI*764XXXY	A	998Z	2018-12-06
	Amount	UoM	Unit type	ST ECOPACK Grade
	97.66	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	
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	S4MI*764XXXY				6000002.0	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	4.371	mg	supplier	die	Silicon (Si)	7440-21-3		4.049	mg	926333	41461
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	6406	287
				supplier	metallization	Copper (Cu)	7440-50-8		0.093	mg	21277	952
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.011	mg	2517	113
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	3203	143
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	229	10
				supplier	Passivation	Silicon Nitride	12033-89-5		0.025	mg	5720	256
				supplier	Passivation	Silicon Oxide	7631-86-9		0.150	mg	34317	1536
				Supplier	Metals	Silver	7440-22-4		0.217	mg	704535	2220
				Supplier	Plastics/polymers	Bisphenol-F, epoxy resin	9003-36-5		0.015	mg	48437	153
Die Attach Epoxy _ABLEBOND 8290_H	M-011 Other inorganic materials	0.308	mg	Supplier	Polymers	Fatty acids, polymers with epichlorohydrin	68475-94-5		0.015	mg	48437	153
				Supplier	Organic Compounds	Gamma Butyrolactone	96-48-0		0.015	mg	48437	153
				Supplier	Epoxy Resin	Epoxy Resin	Proprietary		0.015	mg	48437	153
				Supplier	Amines	Poly(Oxy(methyl-1, 2-ethanediyl))	9046-10-0		0.015	mg	48437	153
				Supplier	Metallic compounds	Copper Oxide	1317-38-0		0.015	mg	48437	153
				Supplier	Organic Compounds	1,4-Bis(2,3-epoxypropoxy) butane	2425-79-8		0.001	mg	4844	15
				Supplier	Plastics/polymers	Epoxy Resin A	Proprietary		0.739	mg	19837	7569
				Supplier	Plastics/polymers	Epoxy Resin B	Proprietary		0.739	mg	19837	7569
				Supplier	Plastics/polymers	Phenol Resin A	Proprietary		0.739	mg	19837	7569
				Supplier	Glass	Silica (Amorphous) A	60676-86-0		24.669	mg	732452	-747391
Mold Compound_EME-G770_Sumitor	M-011 Other inorganic materials	34.639	mg	Supplier	Glass	Silica (Amorphous) B	7631-86-9		6.065	mg	162767	62106
				Supplier	Metallic compounds	Metal Hydroxide	Proprietary		0.739	mg	19837	7569
				Supplier	Additives	Carbon Black	1333-86-4		0.208	mg	5595	2135
				Supplier	Metals	Gold	7440-57-5		0.769	mg	999420	7875
				Supplier	Metals	Palladium	7440-05-3		0.000	mg	520	4
				Supplier	Metals	Lanthanum	7439-91-0		0.000	mg	20	0
				Supplier	Metals	Calcium	7440-70-2		0.000	mg	40	0
				Supplier	Metals	Tin	7440-31-5		3.693	mg	1000000	37813
				Supplier	Metals	Nickel	7440-02-0		1.582	mg	29365	16201
				Supplier	Glass	Silicon	7440-21-3		0.350	mg	6500	3586
Anode Ball_Pure Tin_Nuonengda	M-011 Other inorganic materials	3.693	mg	Supplier	Metals	Magnesium	7439-95-4		0.084	mg	1565	863
				Supplier	Metals	Silver	7440-22-4		3.394	mg	63000	34757
				Supplier	Metals	Copper	7440-50-8		48.467	mg	899570	496295
				Supplier	Metals	Copper	7440-50-8		48.467	mg	899570	496295
Lead frame_C7+Ag_HDS	Copper & its alloys	53.878	mg	Supplier	Metals	Nickel	7440-02-0		1.582	mg	29365	16201
				Supplier	Glass	Silicon	7440-21-3		0.350	mg	6500	3586
				Supplier	Metals	Magnesium	7439-95-4		0.084	mg	1565	863
				Supplier	Metals	Silver	7440-22-4		3.394	mg	63000	34757