


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
M24LR16E-RMN6T/2	PH07*2ED31UB	A	3068	2018-06-07
	Amount	UoM	Unit type	ST ECOPACK Grade
	80.00	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
1	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	
SON	NAC	8	Gull Wing	
Comment	Package : 07 SO 08 .15 JEDEC 0016023			

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	PHO7*2ED31UB				5999999.0	999987.0
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	1.524	mg	supplier	die	Silicon (Si)	7440-21-3		1.460	mg	958005	18250
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	3937	75
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	656	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	656	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2625	50
Lead-frame	M-011 Other inorganic materials	30.429	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.052	mg	34121	650
				supplier	alloy	Copper (Cu)	7440-50-8		29.420	mg	966854	367756
				supplier	alloy	Iron (Fe)	7439-89-6		0.708	mg	23276	8853
				supplier	alloy	Zinc (Zn)	7440-66-6		0.036	mg	1191	453
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.025	mg	833	317
				supplier	coating	Nickel (Ni)	7440-02-0		0.114	mg	3746	1425
				supplier	coating	Palladium (Pd)	7440-05-3		0.007	mg	240	91
				supplier	coating	Gold (Au)	7440-57-5		0.114	mg	3738	1422
				supplier	coating	Silver (Ag)	7440-22-4		0.004	mg	121	46
				Die Attach	M-011 Other inorganic materials	0.105	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4	
supplier	glue or soft solder	acrylate	Proprietary						0.003	mg	32768	43
supplier	glue or soft solder	Methacrylate	Proprietary						0.093	mg	887740	1169
supplier	glue or soft solder	acrylate	Proprietary						0.005	mg	46723	62
Wires	M-011 Other inorganic materials	0.062	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.062	mg	1000000	776
Encapsulation	M-011 Other inorganic materials	47.877	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		3.178	mg	66370	39720
				supplier	Moulding Compound	Phenol Resin	Proprietary		2.118	mg	44247	26480
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		42.200	mg	881419	527500
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.212	mg	4425	2648
				supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.169	mg	3540	2118
Finishing	M-011 Other inorganic materials	0.001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	914840	14
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	29660	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	27750	0
				supplier	connections coating	Silver (Ag)	7440-22-4		0.000	mg	27750	0