


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
M24LR64E-RMN6T/2	PG07*2EF31UB	A	3068	2018-03-05
	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	STDJEDEC	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	PG07*2EF31UB				6999999.0	1000000.0
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	1.721	mg	supplier	die	Silicon (Si)	7440-21-3		1.657	mg	962812	20713
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	3486	75
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	581	13
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	581	13
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	2324	50
Lead-frame	M-011 Other inorganic materials	24.984	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.052	mg	30215	650
				supplier	alloy	Copper (Cu)	7440-50-8		24.347	mg	974500	304339
				supplier	alloy	Iron (Fe)	7439-89-6		0.586	mg	23460	7327
				supplier	alloy	Zinc (Zn)	7440-66-6		0.030	mg	1200	375
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.021	mg	840	262
Lead-frame Coating	M-011 Other inorganic materials	0.124	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.114	mg	916800	1425
				supplier	coating	Palladium (Pd)	7440-05-3		0.007	mg	58700	91
				supplier	coating	Gold (Au)	7440-57-5		0.003	mg	24500	38
Die Attach	M-011 Other inorganic materials	1.027	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.925	mg	900000	11557
				supplier	glue or soft solder	acrylate	Proprietary		0.062	mg	60000	770
				supplier	glue or soft solder	Methacrylate	Proprietary		0.039	mg	38000	488
				supplier	glue or soft solder	acrylate	Proprietary		0.002	mg	2000	26
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	52.080	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		3.938	mg	75617	49226
				supplier	Moulding Compound	Phenol Resin	Proprietary		2.625	mg	50411	32818
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		45.044	mg	864898	563046
				supplier	Moulding Compound	Carbon-black	1333-86-4		0.263	mg	5041	3282
Finishing	M-011 Other inorganic materials	0.001	mg	supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0.210	mg	4033	2625
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.001	mg	916800	14
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	1
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0