


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
M24C64M-FCU6T/TF	P7PT*4W644TA	C	9989	2019-12-03
	Amount	UoM	Unit type	ST ECOPACK Grade
	0.31	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
NAC	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	NAC	4	No lead	
Comment	Package : A0Z7 WLCSP ULTRA-THIN 8508309			

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-27th June 2018				
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	P7PT*4W644TA				9999999.0	1000072.7
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	0.248	mg	supplier	die	Silicon (Si)	7440-21-3		0.234	mg	943548	745223
				supplier	metallization	Aluminium (Al)	7429-90-5		0.001	mg	4032	3185
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	4032	3185
PI1-HD4100	M-011 Other inorganic materials	0.003	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.012	mg	48387	38217
				supplier	Plastics/polymers	PD-9 Resin	57987-55-0		0.002	mg	714286	7166
				supplier	Plastics/polymers	Trifluoroacetic Anhydride	407-25-0		0.000	mg	47619	478
				supplier	Plastics/polymers	Tetraethylene Glycol Dimethacrylate	109-17-1		0.000	mg	142857	1433
PI2-HD4100	M-011 Other inorganic materials	0.002	mg	supplier	Plastics/polymers	4,4'-Oxydiphthalic Anhydride	1823-59-2		0.000	mg	47619	478
				supplier	Plastics/polymers	2-Hydroxyethyl Methacrylate	868-77-9		0.000	mg	47619	478
				supplier	Plastics/polymers	PD-9 Resin	Proprietary		0.002	mg	645161	4777
				supplier	Plastics/polymers	Trifluoroacetic Anhydride	407-25-0		0.000	mg	64516	478
RDL-Ti Target	M-011 Other inorganic materials	0.000	mg	supplier	Plastics/polymers	Tetraethylene Glycol Dimethacrylate	109-17-1		0.000	mg	161290	1194
				supplier	Plastics/polymers	4,4'-Oxydiphthalic Anhydride	1823-59-2		0.000	mg	64516	478
				supplier	Plastics/polymers	2-Hydroxyethyl Methacrylate	868-77-9		0.000	mg	64516	478
				supplier	Alloy	Titanium	7440-32-6		0.000	mg	1000000	318
RDL-AlCu Target	M-011 Other inorganic materials	0.001	mg	supplier	Alloy	Aluminium	7429-90-5		0.001	mg	975610	2548
UBM-Ti Target	M-011 Other inorganic materials	0.000	mg	supplier	Alloy	Copper	7440-50-8		0.000	mg	24390	64
				supplier	Alloy	Titanium	7440-32-6		0.000	mg	1000000	159
UBM-NiV Target	M-011 Other inorganic materials	0.000	mg	supplier	Alloy	Nickel	7440-02-0		0.000	mg	909091	955
				supplier	Alloy	Vanadium	7440-62-2		0.000	mg	90909	96
UBM-Cu Anode	M-011 Other inorganic materials	0.001	mg	supplier	Alloy	Copper	7440-50-8		0.001	mg	1000000	3185
Solder Ball-SACN1255	M-011 Other inorganic materials	0.039	mg	supplier	Alloy	Tin	7440-31-5		0.038	mg	982500	121866
				supplier	Alloy	Silver	7440-22-4		0.000	mg	12000	1488
				supplier	Alloy	Copper	7440-50-8		0.000	mg	5000	620
Lamination tape(LC2850)	M-015 Other organic materials	0.019	mg	supplier	Alloy	Nickel	7440-02-0		0.000	mg	500	62
				supplier	Plastics/polymers	Polyethylene Terephthalate, Silicone	Proprietary		0.005	mg	271903	16713
				supplier	Glass	Silica	Proprietary		0.005	mg	271903	16713
				supplier	Plastics/polymers	Epoxy Resin	Proprietary		0.001	mg	60423	3714
				supplier	Plastics/polymers	Acrylic Resin	Proprietary		0.001	mg	60423	3714
				supplier	Alloy	Carbon Black	Proprietary		0.000	mg	3021	186
				supplier	Plastics/polymers	Polyethylene Terephthalate, Silicone	Proprietary		0.006	mg	332326	20426