


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F042F6P7	P2YA*445XXXA	A	9998	23-01-2018
	Amount	UoM	Unit type	ST ECOPACK Grade
	72.00	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	
Not Applicable; if coating is used or other bulk termination	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
-	6.5x4.4x1	20		
Comment	Package : YA TSSOP 20 BODY 4.4 PITCH 0.65 0087225			

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	P2YA*445XXXA				5999997.0	0.0				
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	4.905	mg	supplier	die	Silicon (Si)	7440-21-3		4.632	mg	944343	64332				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	3874	264				
				supplier	metallization	Copper (Cu)	7440-50-8		0.093	mg	18960	1292				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.017	mg	3466	236				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1019	69				
				supplier	metallization	Tungsten (W)	7440-33-7		0.010	mg	2039	139				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.012	mg	2446	167				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.117	mg	23853	1625				
				LEADFRAME	Copper and its alloy	36.431	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		34.408	mg	944470	477882
								supplier	ALLOY	Nickel (Ni)	7440-02-0		1.073	mg	29453	14903
supplier	ALLOY	Silicon (Si)	7440-21-3						0.232	mg	6368	3222				
supplier	ALLOY	Magnesium (Mg)	7439-95-4						0.054	mg	1482	750				
supplier	COATING	Nickel (Ni)	7440-02-0						0.647	mg	17760	8986				
supplier	COATING	Palladium (Pd)	7440-05-3						0.014	mg	384	194				
supplier	COATING	Gold (Au)	7440-57-5						0.003	mg	82	42				
DIE ATTACH	M-011 Other inorganic materials	0.848	mg	supplier	GLUE	Epoxy resin A	9003-36-5		0.059	mg	69575	819				
				supplier	GLUE	Epoxy resin B	68475-94-5		0.034	mg	40094	472				
				supplier	GLUE	Silver(Ag)	7440-22-4		0.653	mg	770047	9069				
				supplier	GLUE	Lactone	96-48-0		0.034	mg	40094	472				
				supplier	GLUE	Polyoxypropylenediamine	9046-10-0		0.034	mg	40094	472				
				supplier	GLUE	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.034	mg	40094	472				
BONDING WIRE	M-011 Other inorganic materials	0.270	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.267	mg	988889	3708				
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.003	mg	11111	42				
ENCAPSULATION	M-011 Other inorganic materials	25.897	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		2.772	mg	94685	38499				
				supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		24.348	mg	831671	-661836				
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		2.002	mg	68384	27805				
FINISHING	M-011 Other inorganic materials	0.271	mg	supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.154	mg	5260	2139				
				supplier	CONNECTION COATING	Nickel (Ni)	7440-02-0		0.264	mg	974170	3667				
				supplier	CONNECTION COATING	Palladium (Pd)	7440-05-3		0.006	mg	22140	83				
				supplier	CONNECTION COATING	Gold (Au)	7440-57-5		0.001	mg	3690	14				