




Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F103REY6TR	H0CR*414CCCX	B	9989	2017-07-07
Amount		UoM	Unit type	ST ECOPACK Grade
33.76		mg	Each	ECOPACK® 2

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	Tin/Silver/Copper (Sn/Ag/Cu)	NAC		

Package Designator	Size	Nbr of instances	Shape	
BGA	NAC	64	No lead	
Comment	WLCSP 64L R8X8 0.5 mm pitch			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-15th June 2015				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	HOCR*414CCCX					
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	Other inorganic materials	17.067	mg	supplier	die	Silicon (Si)	7440-21-3		16.567	mg	970704	490772
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2988	1511
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2812	1422
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	820	415
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1641	829
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.034	mg	1992	1007
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.325	mg	19043	9628
Coating Chem (HD4100)	Other inorganic materials	9.727	mg	supplier	Polymer	PD-9 Resin	Proprietary		0.282	mg	28991	8354
Coating Chem (HD4100)				supplier	Polymer	Trifluoroacetic Anhydride	407-25-0		4.229	mg	434769	125278
Coating Chem (HD4100)				supplier	Polymer	Tetraethylene Glycol Dimethacrylate	109-17-1		0.705	mg	72479	20885
Coating Chem (HD4100)				supplier	Polymer	4,4'-Oxydiphthalic Anhydride	1823-59-2		4.229	mg	434769	125278
Coating Chem (HD4100)				supplier	Polymer	2-Hydroxyethyl Methacrylate	868-77-9		0.282	mg	28991	8354
Ti End Target	Other inorganic materials	0.008	mg	supplier	Metal	Titanium	7440-32-6		0.008	mg	1000000	237
NiV End Target	Other inorganic materials	0.061	mg	supplier	Metal Alloy	Ni	7440-02-0		0.056	mg	918033	1659
NiV End Target				supplier	Metal Alloy	Vanadium	7440-62-2		0.005	mg	81967	148
Cu End Target	Other inorganic materials	0.122	mg	supplier	Metal	Copper	7440-50-8		0.122	mg	1000000	3614
AlCu End Target	Other inorganic materials	0.074	mg	supplier	Metal Alloy	Aluminum	7429-90-5		0.002	mg	27027	59
AlCu End Target				supplier	Metal Alloy	Copper	7440-50-8		0.072	mg	972973	2133
Solder Balls (SAC405)	Other inorganic materials	6.698	mg	supplier	Metal Alloy	Tin	7440-31-5		6.397	mg	955061	189501
Solder Balls (SAC405)				supplier	Metal Alloy	Silver	7440-22-4		0.268	mg	40012	7939
Solder Balls (SAC405)				supplier	Metal Alloy	Copper	7440-50-8		0.033	mg	4927	978