




Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D
* : Required Field			

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-09-05
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement	
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Legal Statement	
Supplier Acceptance *	true
	Legal Declaration *
Legal Statement	<p>Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.</p>

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32L476JGY6PTR	T93F*415CCC4	A	996S	2018-09-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	32.22	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	
Tin/Silver/Copper/Nickel(SAC405)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
WLCSF	Not Applicable	144	No lead	
Comment	Package : A085 WLCSF 144L DIE 470 PITCH 0.4 DM00229029			

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	T93F*41SCCC4				9000001.0	1005473.0
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	22.877	mg	supplier	die	Silicon (Si)	7440-21-3		21.939	mg	958998	680958
				supplier	metallization	Aluminium (Al)	7429-90-5		0.045	mg	1967	1397
				supplier	metallization	Copper (Cu)	7440-50-8		0.397	mg	17354	12322
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	44	31
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.129	mg	5639	4004
				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	219	155
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	131	93
				supplier	Passivation	Silicon Nitride	12033-89-5		0.101	mg	4415	3135
				supplier	Passivation	Silicon Oxide	7631-86-9		0.257	mg	11234	7977
				Plating Seed layer 1	M-011 Other inorganic materials	0.031	mg	supplier	Alloy	Ti	7440-32-6	
supplier	Alloy	Cu	7440-50-8						0.025	mg	799037	256
Re-passivatipon layer	M-011 Other inorganic materials	0.237	mg	supplier	Polymer	4-Butyrolactone	96-48-0		0.213	mg	900000	6568
				supplier	Polymer	1-Methoxy-2-propyl acetate	108-65-6		0.024	mg	100000	730
Redistribution Layer	M-011 Other inorganic materials	0.500	mg	supplier	Alloy	Cu	7440-50-8		0.500	mg	1000000	15901
Plating Seed layer 2	M-011 Other inorganic materials	0.010	mg	supplier	Alloy	Ti	7440-32-6		0.002	mg	200963	200
				supplier	Alloy	Cu	7440-50-8		0.008	mg	799037	795
Re-passivatipon layer	M-011 Other inorganic materials	0.237	mg	supplier	Polymer	4-Butyrolactone	96-48-0		0.213	mg	900000	6568
				supplier	Polymer	1-Methoxy-2-propyl acetate	108-65-6		0.024	mg	100000	730
UBM	M-011 Other inorganic materials	0.523	mg	supplier	Alloy	Cu	7440-50-8		0.523	mg	1000000	16605
Solder ball	Solder	6.823	mg	supplier	Solder	Sn	7440-31-5		6.516	mg	955000	207027
				supplier	Solder	Ag	7440-22-4		0.273	mg	40000	8671
				supplier	Solder	Cu	7440-50-8		0.034	mg	5000	1084
Back Side Coating	M-011 Other inorganic materials	0.981	mg	supplier	Polymer	Polybutylene terephthalate (PBT)	25038-59-9		0.637	mg	650000	19631
				supplier	Polymer	Silica	Proprietary		0.191	mg	195000	5889
				supplier	Polymer	Proprietary Material-Other Epoxy resins	Proprietary		0.074	mg	75000	2265
				supplier	Polymer	Proprietary Material-Other Acrylic resins	Proprietary		0.074	mg	75000	2265
				supplier	Polymer	Carbon black	1333-86-4		0.005	mg	5000	151