




Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-06-04
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 *	Standard
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
ST25TV02K-AD6H3	CGTH*TVAD1UC	A	P1C7	2018-06-04
	Amount	UoM	Unit type	ST ECOPACK Grade
	6.35	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	
QFN	1.7x1.4x0.6	5	No lead	
Comment	Package : A0UK UFDFPN5 8421456			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CGTH*TVAD1UC				5999999.0	999920.0
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	0.467	mg	supplier	die	Silicon (Si)	7440-21-3		0.447	mg	957173	70394
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	4283	315
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	2141	157
				supplier	Passivation	Silicon Oxide	7631-86-9		0.017	mg	36403	2677
Lead-frame	M-011 Other inorganic materials	3.214	mg	supplier	alloy	Copper (Cu)	7440-50-8		3.123	mg	971532	491808
				supplier	alloy	Iron (Fe)	7439-89-6		0.075	mg	23389	11840
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	1196	606
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.003	mg	837	424
				supplier	coating	Nickel (Ni)	7440-02-0		0.009	mg	2792	1413
				supplier	coating	Palladium (Pd)	7440-05-3		0.001	mg	179	91
				supplier	coating	Gold (Au)	7440-57-5		0.000	mg	75	38
Die Attach	M-011 Other inorganic materials	0.110	mg	supplier	glue or soft solder	epoxy resin	25068-38-6		0.011	mg	100000	1738
				supplier	glue or soft solder	Cycloaliphatic Epoxy Resin	244772-00-7		0.011	mg	100000	1738
				supplier	glue or soft solder	Phenol resin	9003-35-4		0.011	mg	100000	1738
				supplier	glue or soft solder	amorphous silica	7631-86-9		0.077	mg	700000	12168
Wires	M-011 Other inorganic materials	0.009	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.009	mg	1000000	1386
Encapsulation	M-011 Other inorganic materials	2.549	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		2.276	mg	892997	358425
				supplier	Moulding Compound	Phenolic resin	Proprietary		0.069	mg	27072	10866
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.099	mg	38885	15608
				supplier	Moulding Compound	carbon black	1333-86-4		0.006	mg	2160	867
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.099	mg	38885	15608
Finishing	M-011 Other inorganic materials	0.000	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.000	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